

Agenda

1:30-2:45

1. Wallop: Sharing and Presence in Social Networks
2. Flipper: Peer-to-Peer "photo-blogs" on the Longhorn Sidebar
3. Mobile Flipper: Mobile and desktop sharing and presence
4. Swarm: Smart Mobs on mobile cell phones
5. Canopus: Community-oriented RSS on your desktop

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3. Mobile Flipper: Mobile and desktop sharing and presence
4. Swarm: Smart Mobs on mobile cell phones
5. Canopus: Community-oriented RSS on your desktop

Agenda (continued)

3:00-4:00

6. Sapphire & Longhorn: Prototyping the hard problems (file migration & hierarchy, saving, lightweight lists)
7. Sharing: Suggested people and groups
8. One-Page Meeting Prep: Automatically generated, personalized meeting prep
9. Jeitinhos: Improving matchmaking for xBox live

Summary, Q & A

This talk is streamed/recorded:
<http://resnet/guide>

Presentations & sharepoint: <http://groupsts/scg/>

Contacts-feedback: project teams, Lilich

Social Software

- **Meeting people's social goals:**

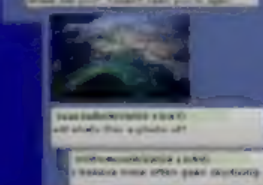
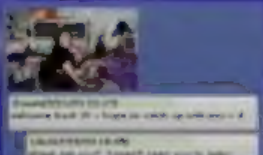
- Help people who are social be more social
- Continuous access to, awareness of, and communication with people they care about as a part of day to day life

Provide friends with updates about their activities

Develop new social relationships

- **Problem space:**

- Representing identity information
profile info, status, reputation, social context
- Representing social interactions
who's talking, who knows whom, groups, cliques, networks
- Integrating communication and media sharing
- Building critical mass, scaling appropriately



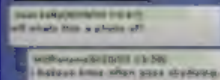
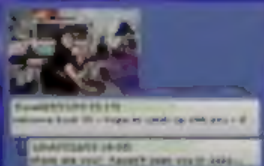
Social Software

Meeting people's social goals:

- Help people who are social be more social
- Continuous access to, awareness of, and communication with people they care about as a part of day to day life
- Provide friends with updates about their activities
- Develop new social relationships

Problem space:

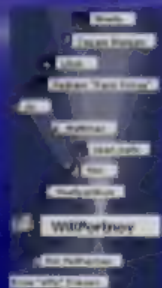
- Representing identity information
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Wallop: meeting users' social goals

Building conversations in the context of shared media your social network

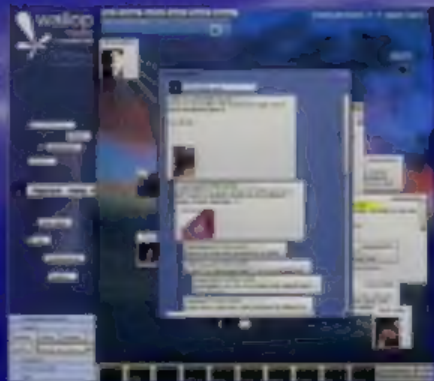
- Wall opportunities for projecting identity, learning about others, through lightweight authoring
 - Browse profiles, photo sharing
- Opportunities to "bump" into friends, and friends of friends
 - Centralized social awareness, sharing and communication tools
 - Browse through social network map, through connections in shared media
 - "Overhear" conversations that occur in context of shared media
- Learn about others by seeing them in their social context
 - Content personalized/filtered depending on network distances
 - Explicit social networks
 - links to friends
 - Implicit social networks
 - network connections based on communication behavior, more meaningful
- Sharing integrated with day to day communication
 - Updating Wallop content through "overhearing" email/IM/SMS agent
 - Notifications/messages from Wallop to email/IM/SMS



Wallop Demo

• Social Awareness Tools

- Social network
- Activity (recent and important)
- Point-to-Point
- Embedded conversations
- iBlogs
- Email/IM/SMS integration





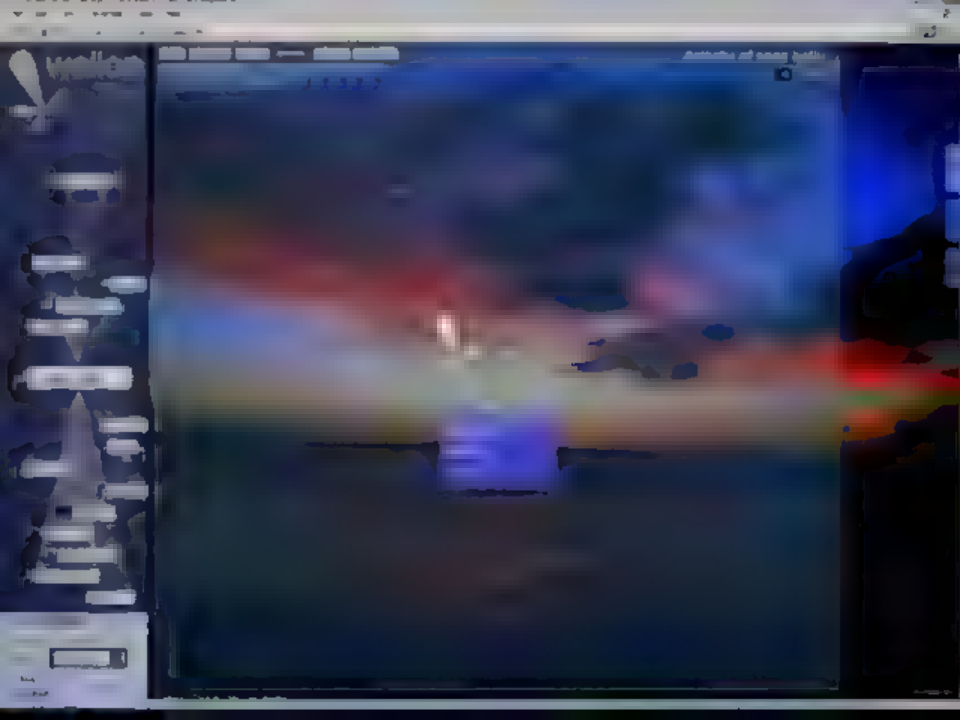
137x3

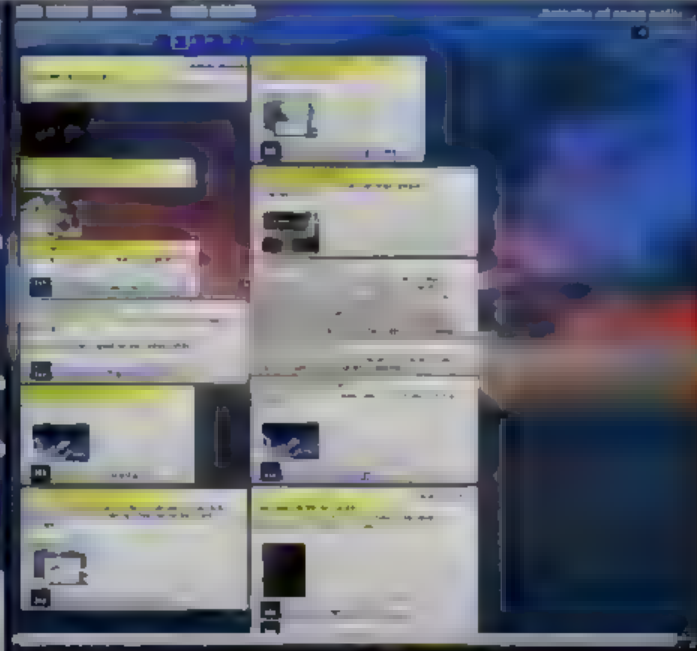
The central area of the page is a large grid of content. It features several video thumbnails, each with a small play button icon in the bottom left corner. The thumbnails are arranged in a grid-like fashion, with some larger than others. The background of this section is a dark blue gradient. At the top of this section, the text '137x3' is visible. The overall layout suggests a video gallery or a collection of related content.

Vertical sidebar containing a series of small, illegible labels or icons, possibly representing a list of items or a navigation menu.



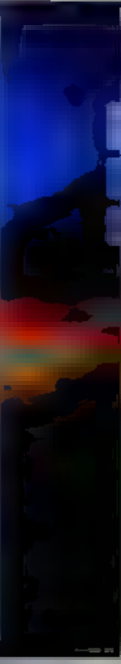
Vertical sidebar on the right side of the page, containing a series of small, illegible labels or icons, possibly representing a list of items or a navigation menu.

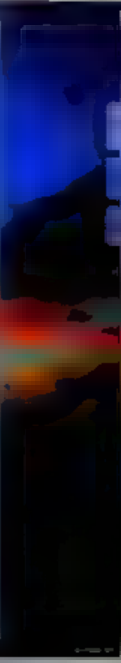
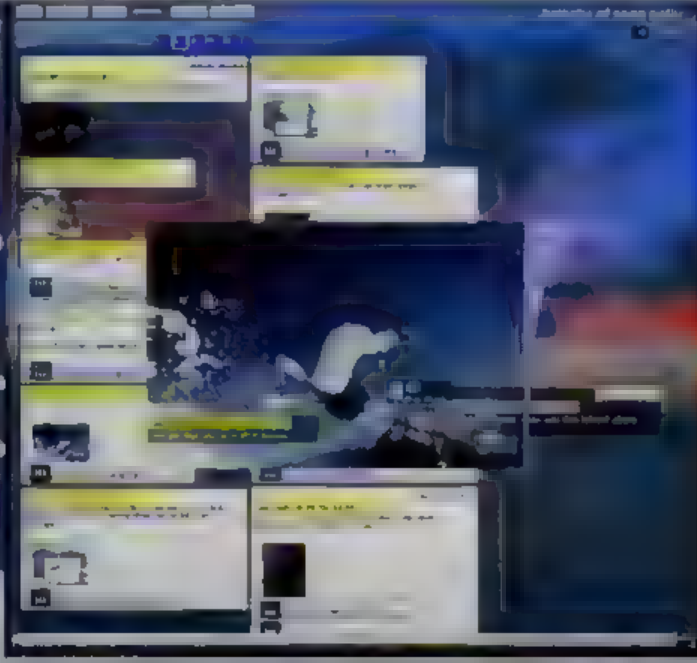


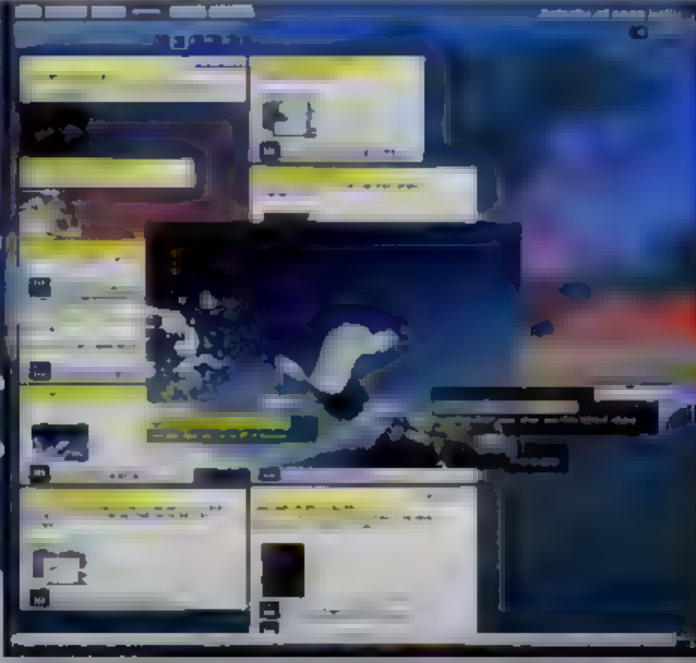




A large central area displaying a grid of content, likely a news or information feed. The grid is organized into two main columns. The left column contains several rectangular blocks, each with a small image and text. The right column contains larger blocks, some with images and text, and others with more complex layouts. The overall design is clean and modern, with a focus on visual hierarchy and readability.



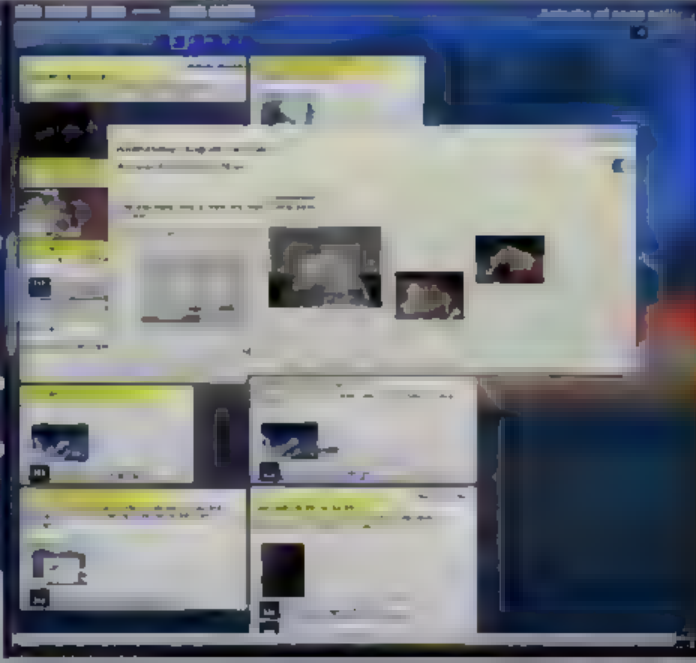


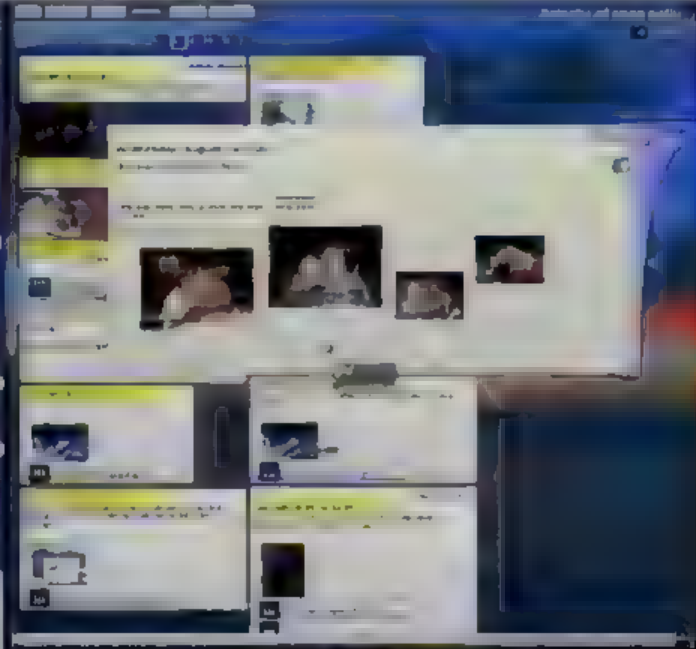


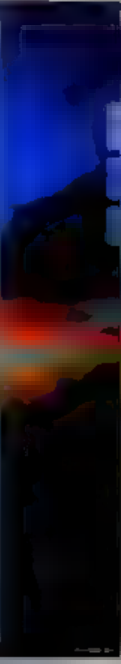
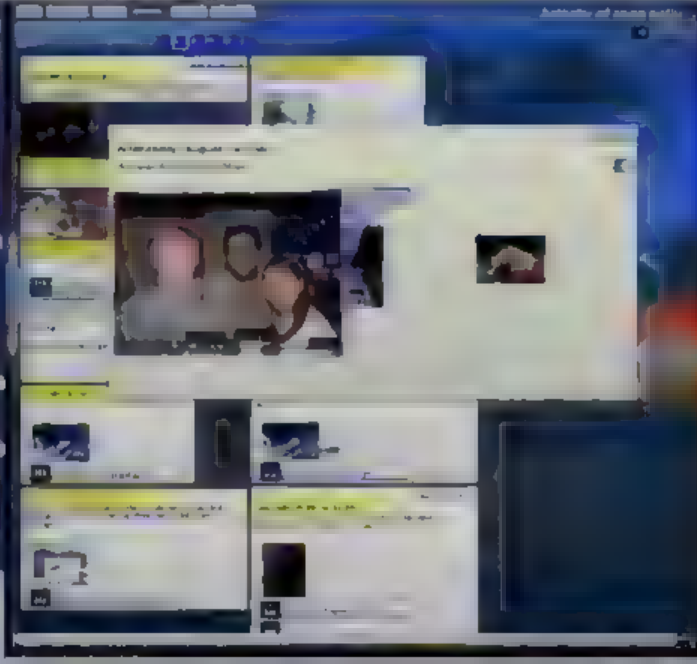


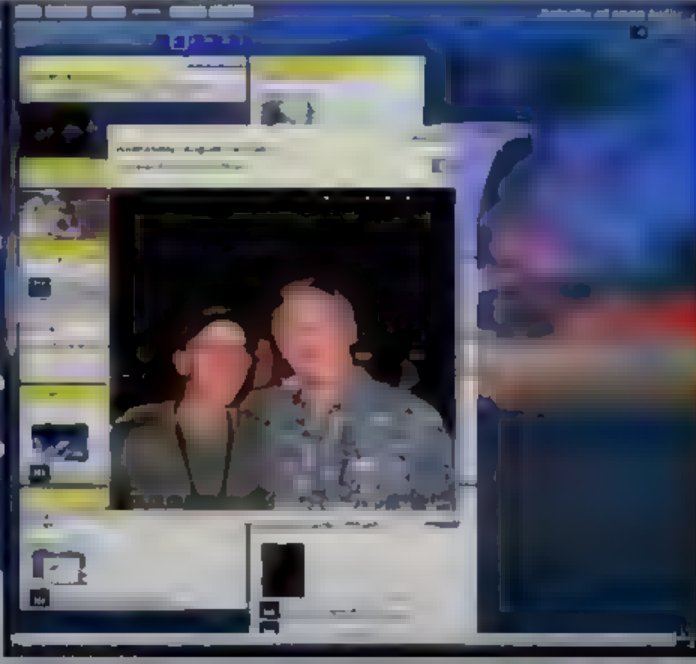
The main content area of the page, which is heavily blurred. It appears to contain a large central image or video player, surrounded by various text blocks, links, and possibly smaller images. The overall layout suggests a news or information page, but the content is too blurry to discern.

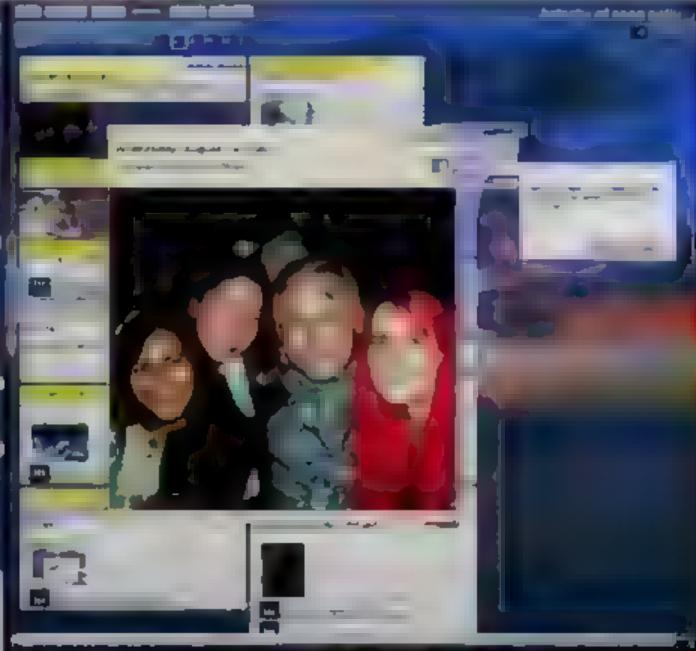


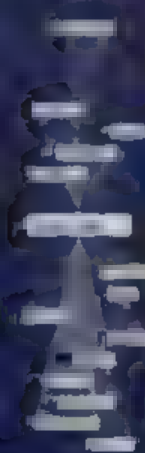






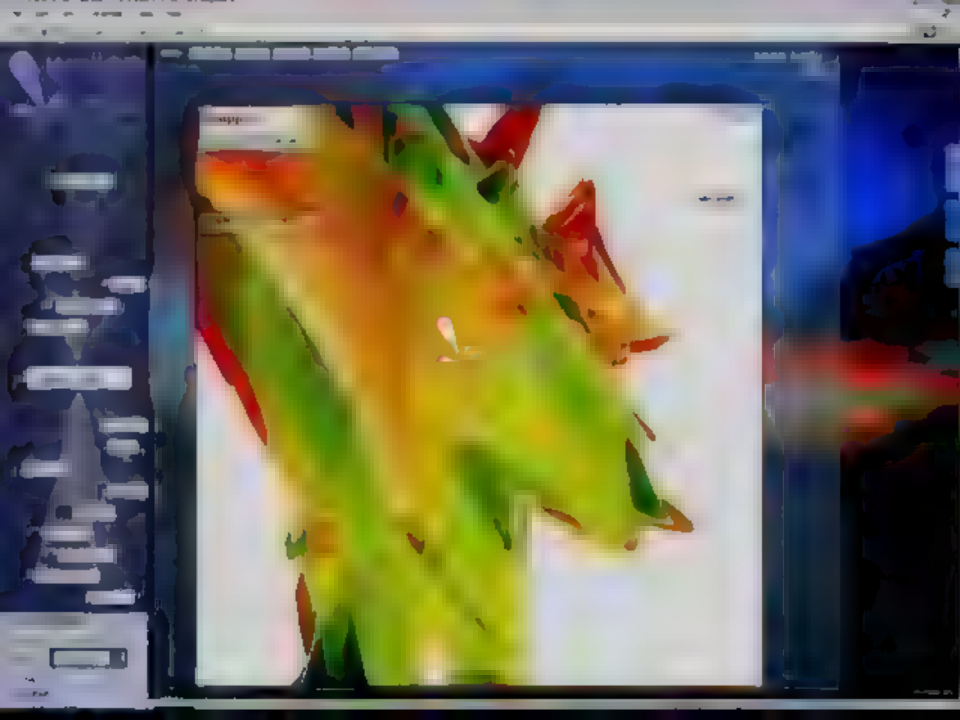






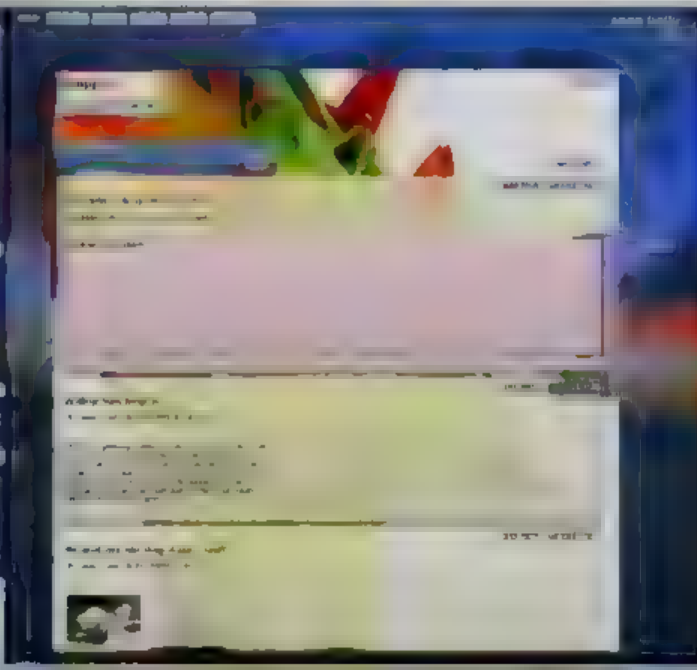
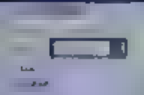
A large central area displaying a grid of content blocks, likely a news or article feed. The blocks are arranged in two main columns. Each block contains a small image at the top, followed by a title and a short text snippet. The background of the central area is a dark, abstract image with blue and purple hues.

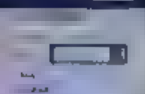






The main content area features a large, vibrant image of a butterfly with orange, black, and white wings. Below this image, there are several text blocks and a small inset image. The text is arranged in a structured layout, with headings and paragraphs. A small inset image shows a close-up of a butterfly's wing. The overall design is clean and professional, with a focus on the butterfly theme.

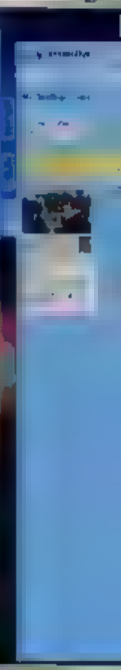
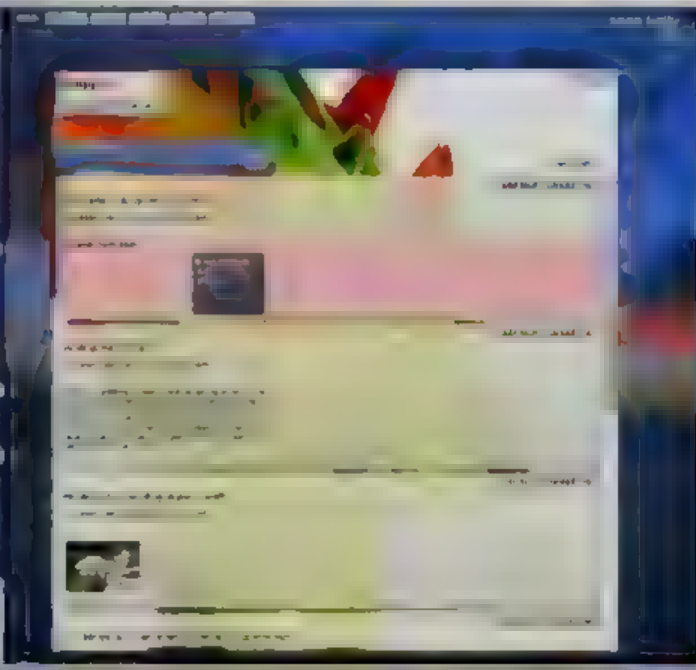
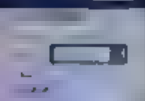


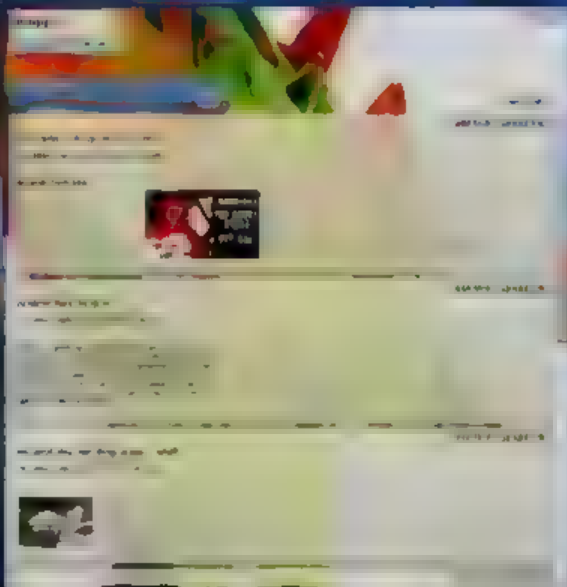


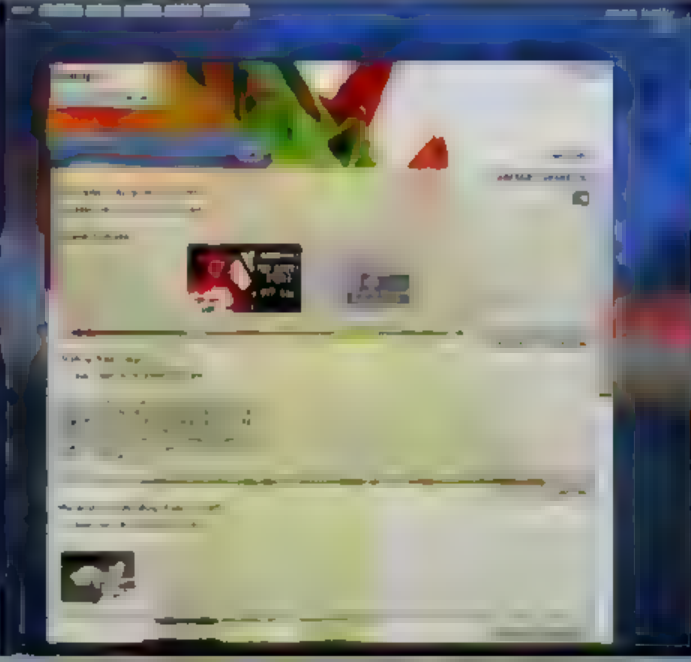
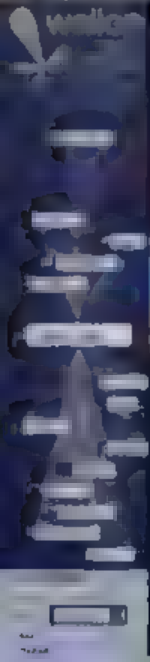
Desktop background image showing a colorful, abstract scene with a large red flower or leaf in the foreground and a bright, hazy background.

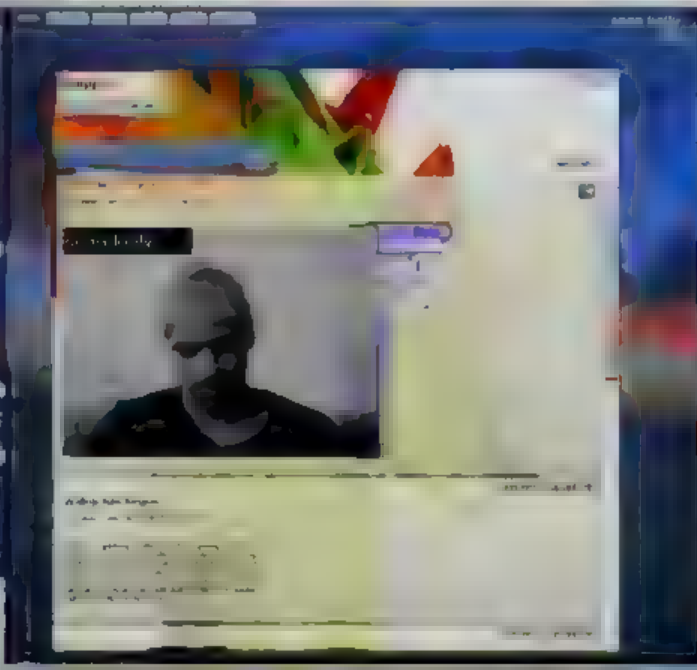
Taskbar at the bottom of the desktop window.

Vertical sidebar on the right side of the desktop, featuring a light blue background and several small, dark rectangular icons or buttons.











1974-1975

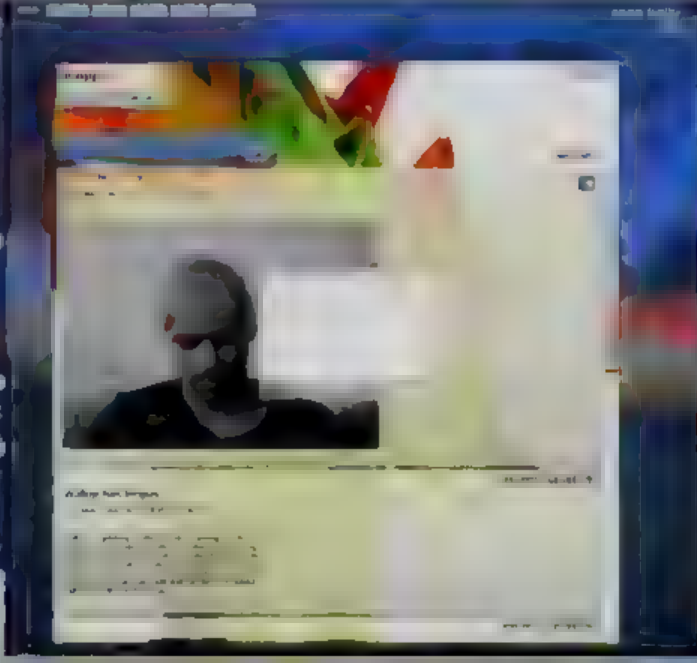
1992

$$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$$

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100





Yahoo! Home

Search

News

Sports

Finance

Weather

Local

Health

Travel

Real Estate

Jobs

Education

Reference

Shopping

Games

Music

Video

Weblogs

Mobile

More

Yahoo! Home

Search

News

Sports

Finance

Weather

Local

Health

Travel

Real Estate

Jobs

Education

Reference

Shopping

Games

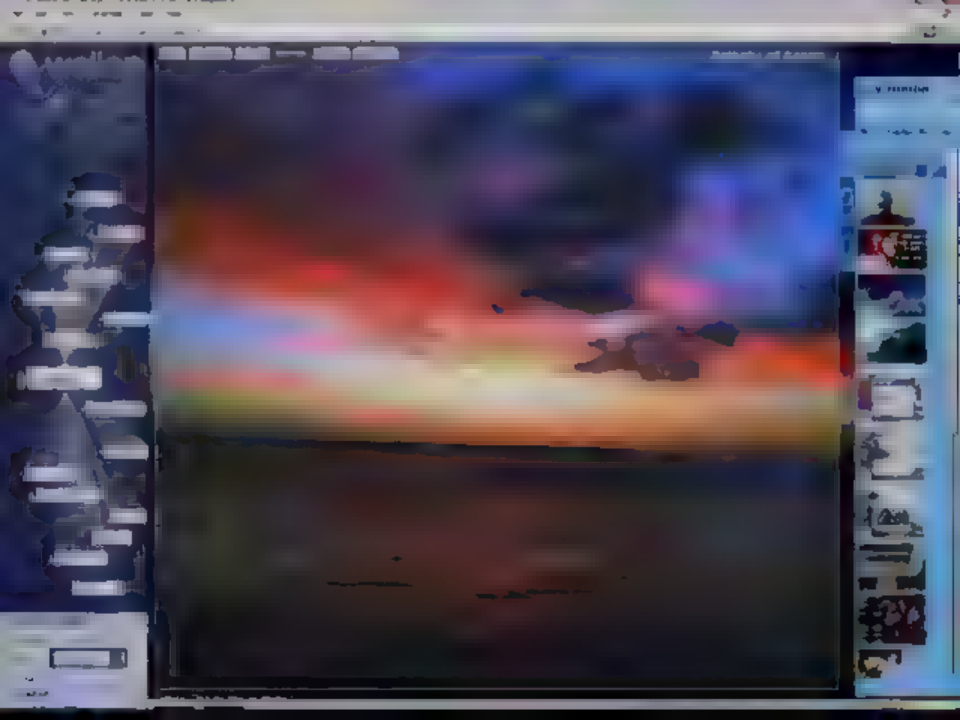
Music

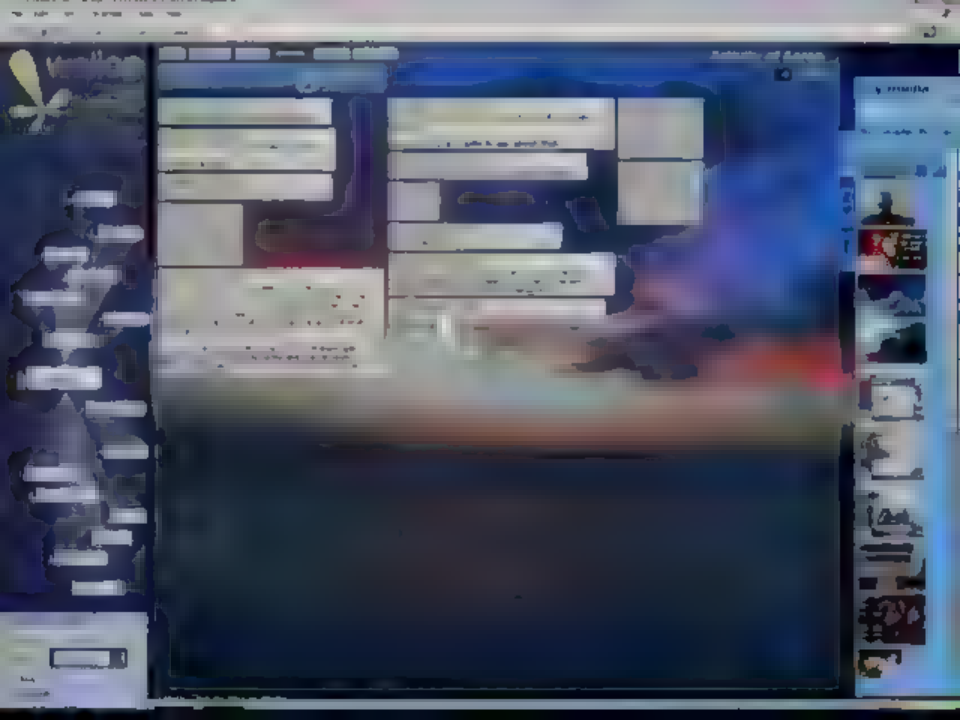
Video

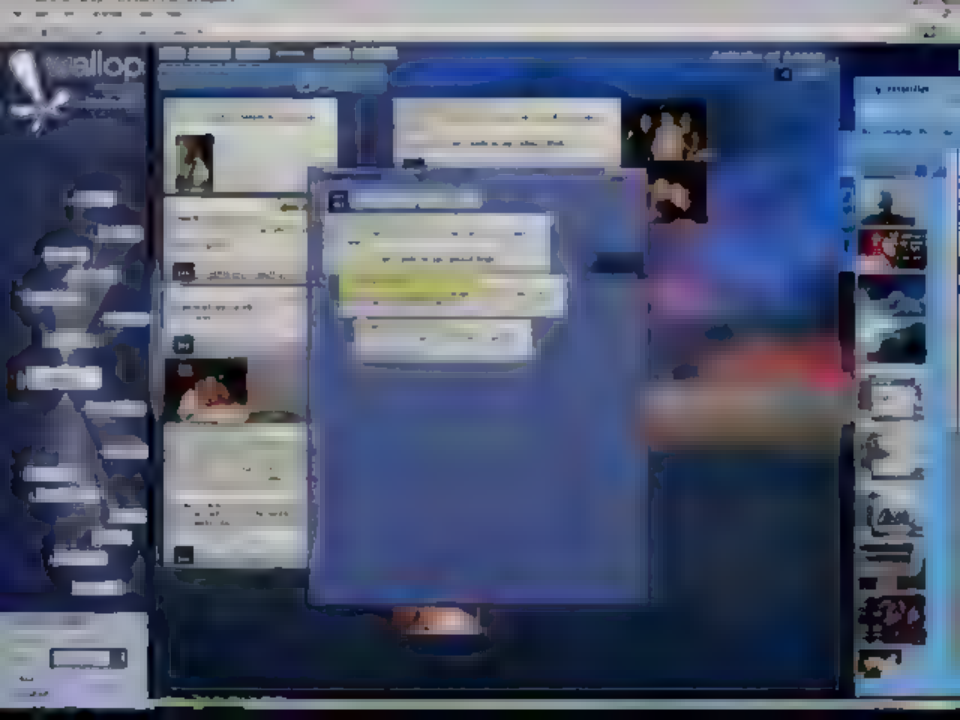
Weblogs

Mobile

More









The main content area of the browser window is filled with a grid of various web pages and images. These include:

- Several small thumbnail images, likely representing search results or featured content.
- Text-based content blocks, possibly snippets from news articles or search results.
- A large, prominent image in the center-right area, which appears to be a group of people.
- Various other smaller images and text elements scattered throughout the grid.

The right side of the browser window contains a vertical sidebar with several elements:

- A search bar at the top, labeled "Search" and "Find".
- A list of links or categories, including "Home", "News", "Sports", "Entertainment", "Science", "Technology", "Health", "Education", "Business", "Travel", "Food", "Fashion", "Art", "Music", "Gaming", "Books", "Movies", "TV", "Radio", "Weather", "Maps", "Shopping", "Finance", "Real Estate", "Automotive", "Hobbies", "Pets", "Gardening", "DIY", "Health", "Education", "Business", "Travel", "Food", "Fashion", "Art", "Music", "Gaming", "Books", "Movies", "TV", "Radio", "Weather", "Maps", "Shopping", "Finance", "Real Estate", "Automotive", "Hobbies", "Pets", "Gardening", "DIY".
- A series of small thumbnail images arranged vertically, possibly representing a gallery or a list of featured content.

WELCOME

Navigation icons: Home, Search, Add, etc.

Left sidebar menu:

- Home
- Search
- Add
- More
- Settings
- Account
- Privacy
- Help
- Feedback

Main content area with multiple posts:

Post 1: [Profile Picture] [Text]

Post 2: [Profile Picture] [Text]

Post 3: [Profile Picture] [Text]

Post 4: [Profile Picture] [Text]

Post 5: [Profile Picture] [Text]

Post 6: [Profile Picture] [Text]

Post 7: [Profile Picture] [Text]

Post 8: [Profile Picture] [Text]

Post 9: [Profile Picture] [Text]

Post 10: [Profile Picture] [Text]

Post 11: [Profile Picture] [Text]

Post 12: [Profile Picture] [Text]

Post 13: [Profile Picture] [Text]

Post 14: [Profile Picture] [Text]

Post 15: [Profile Picture] [Text]

Post 16: [Profile Picture] [Text]

Post 17: [Profile Picture] [Text]

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Post 81: [Profile Picture] [Text]

Post 82: [Profile Picture] [Text]

Post 83: [Profile Picture] [Text]

Post 84: [Profile Picture] [Text]

Post 85: [Profile Picture] [Text]

Post 86: [Profile Picture] [Text]

Post 87: [Profile Picture] [Text]

Post 88: [Profile Picture] [Text]

Post 89: [Profile Picture] [Text]

Post 90: [Profile Picture] [Text]

Post 91: [Profile Picture] [Text]

Post 92: [Profile Picture] [Text]

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Post 95: [Profile Picture] [Text]

Post 96: [Profile Picture] [Text]

Post 97: [Profile Picture] [Text]

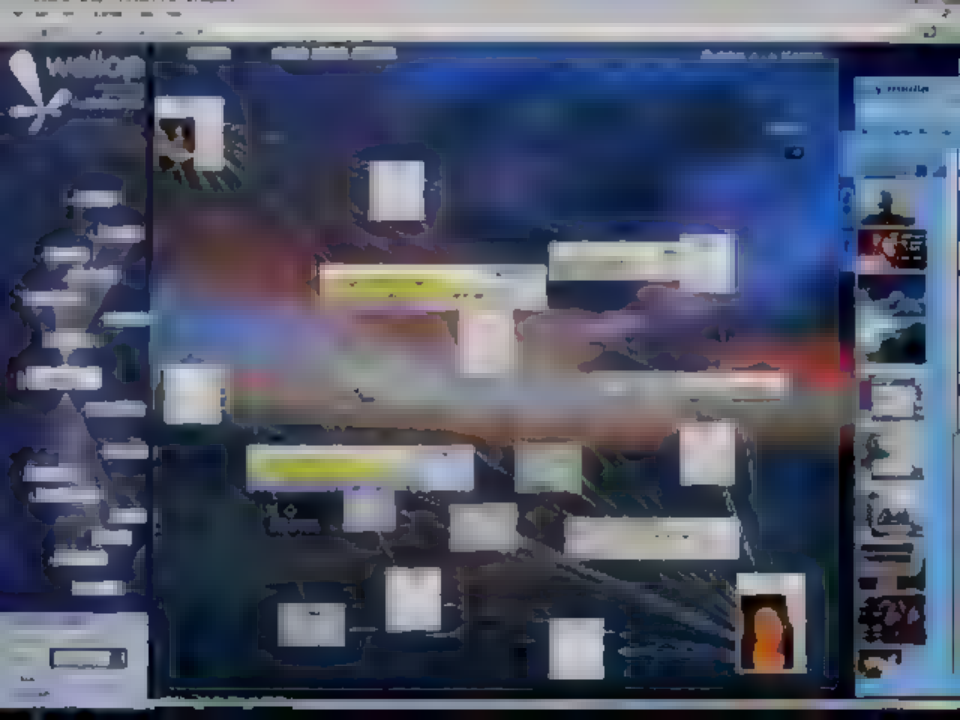
Post 98: [Profile Picture] [Text]

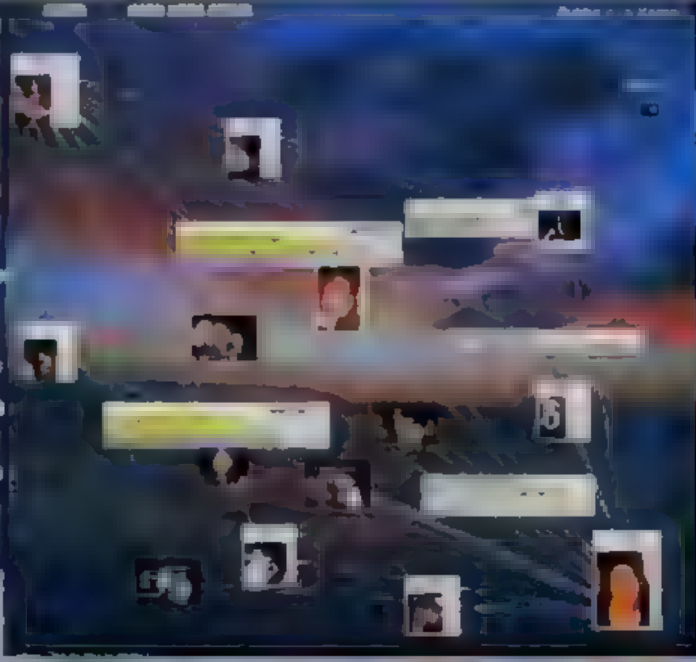
Post 99: [Profile Picture] [Text]

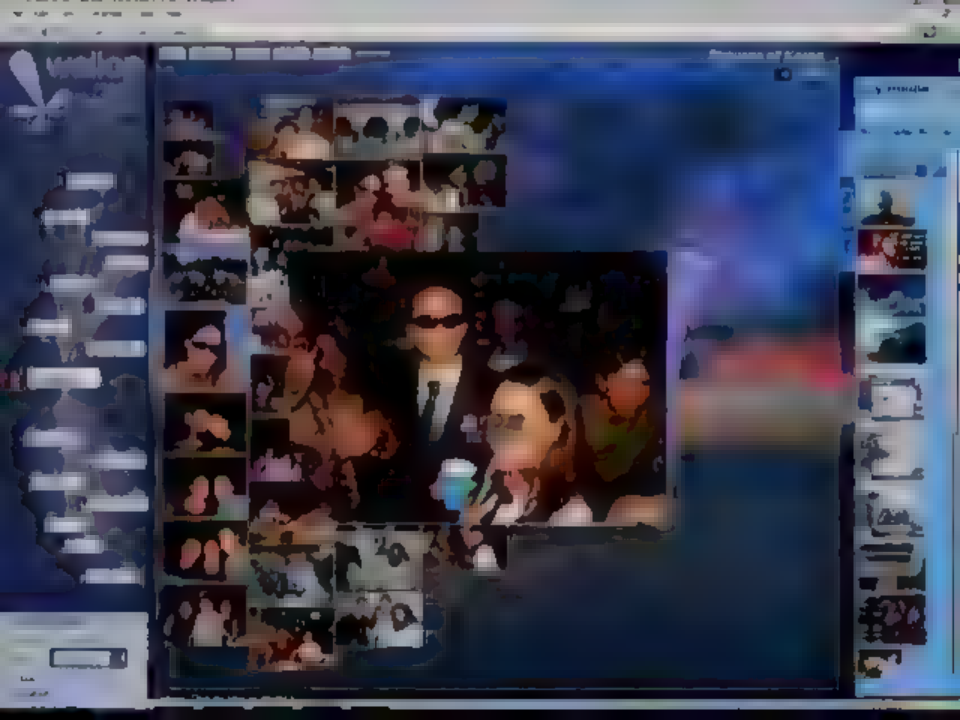
Post 100: [Profile Picture] [Text]

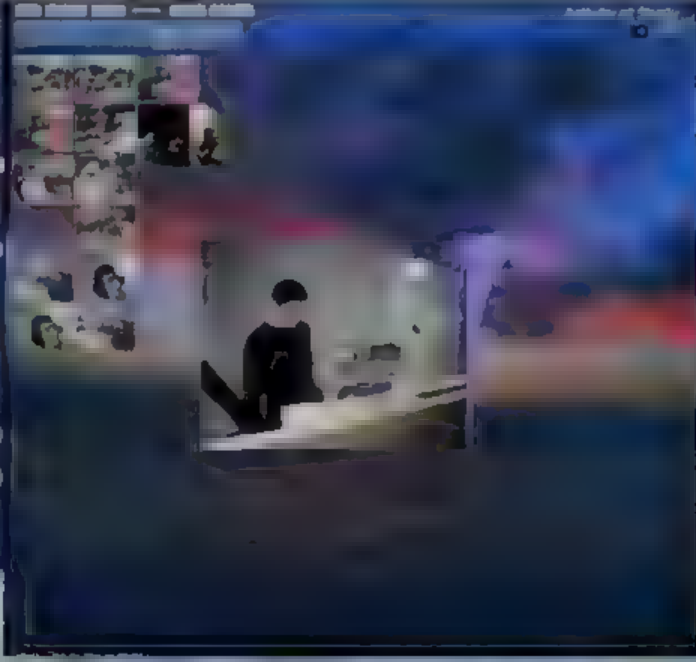
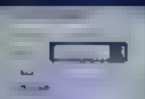
Right sidebar menu:

- Home
- Search
- Add
- More
- Settings
- Account
- Privacy
- Help
- Feedback

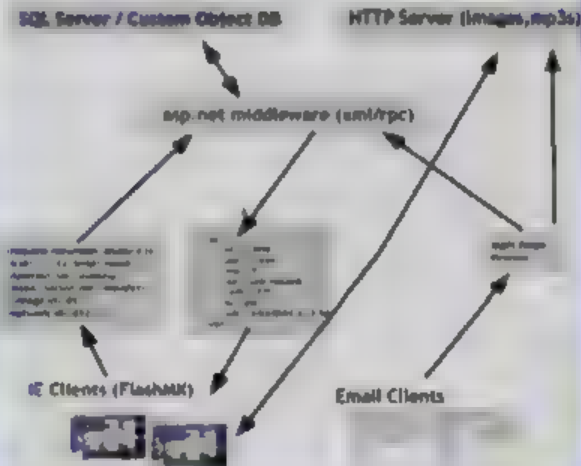








Wallop Architecture



Next Steps



September 11, 2001

September 11, 2001

September 11, 2001

September 11, 2001

Flipper

Michał Wiliński Ryszard Kott
Social Computing Group, MSR
Aug 21, 2003

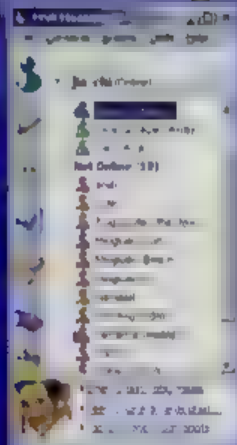
Overview

- Introduction
- Overview
- **Future work**

Goal

- **Intuitive, easy to use**
- **Support pictures & annotations**
- **Real-time awareness, notifications**
- **Web 2.0 style: more open than IM**

Background



Background

• **Background**



Background

• [Introduction](#)

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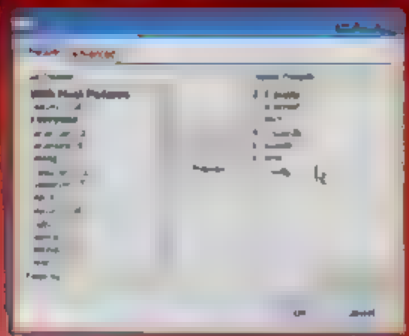
Background

- [Background](#)

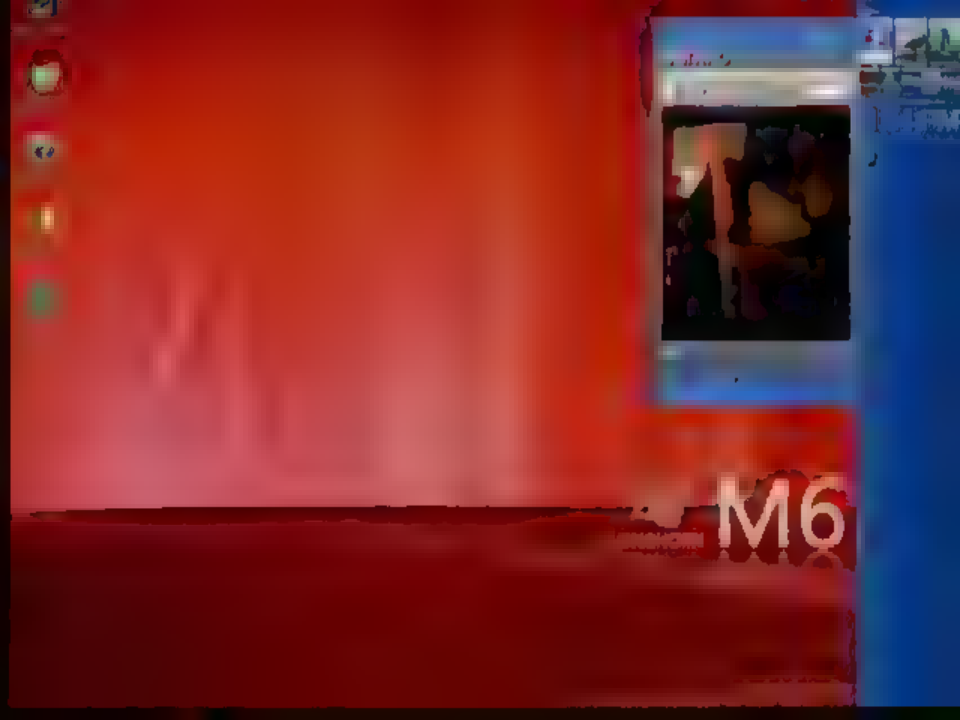


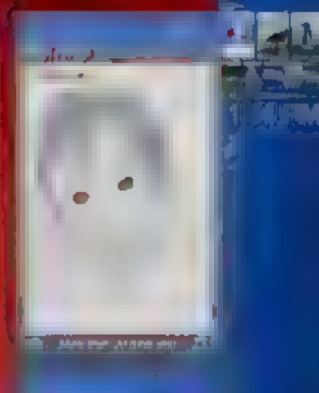
بروز ۱۳۸۸

M6

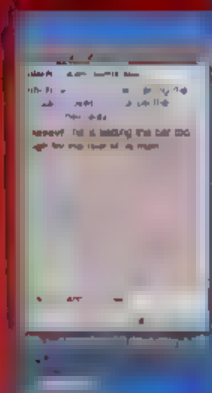


M6

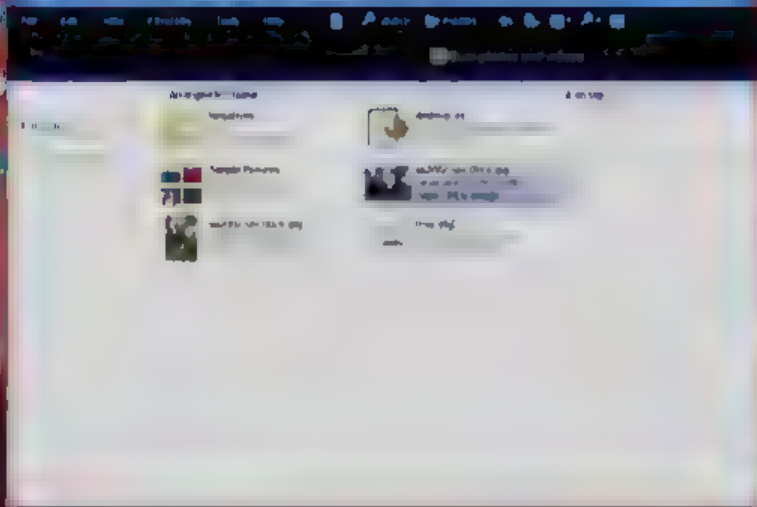




M6



M6





P2Pnets & Flipper

- P2Pnets is a framework for Flipper
 - No central server
 - Each group is a distributed DB
 - Information gets propagated only to people who subscribe to see the person

• WinP2P ver. 1.0 released 7/23/2003 through MS Windows updates.

Peernets & Flipper

- Peer-to-peer alternative for Flipper
 - No central server
 - Each group is a distributed DB
 - Search a person gets propagated only to people who subscribe to see the person

WinP2P ver. 1.0 released 7/23/2003 through MS Windows updates.

Flipper Graphs



Personal
Graph A

Personal
Graph B



Statistics like #
pictures available

- Personal graph carries
 - pictures posted by the graph owner
 - annotations to the pictures from any user
 - names of users
 - usage data
 - bulk of data being exchanged

Peermets issues

- **Performance**
 - **Scalability** - adding any graphs
 - **Performance** - graphs updating data
- **Flexibility**

- **Scope** - to the Peermets record level only
 - **Supported** - "Get picture records added since last week"
 - **Not supported** - "Get 5 people with most pictures"

• **Management issues**

- **Records** - can expire; updates can be overwritten

• **Application has to cache records data**

- **For better user's experience, caching of pictures and other info is a must**

Next steps

- Add support for:
 - Shared folders
 - Shared drives
 - Shared printers
 - Shared serial ports
 - Shared modem
 - Shared network
 - Shared storage
 - Shared security
 - Shared functionality
- Add support for:
 - Shared style IDs, multiple identities
 - Adding buddy groups for access control
 - Integrate with other SCG projects
 - Wallport, PocketPC Flipper, other sharing projects

Questions?

Acknowledgments:

the MS Promote team, the LH Sidebar team

Contact:

myname@mc.man.ac.uk, mc.man.ac.uk, <http://mc.man.ac.uk>

Flipper Graphs



Personal

Graphs

Community

Graphs



Statistics like # pictures available

- Personal graph carries
 - pictures posted by the graph owner
 - annotations to the pictures from any user
 - names of users
 - usage data
 - bulk of data being exchanged

Mobile Flipper

Scott D. Starnes

Fellheimer (MIT)

Mobile Computing Group, MSR

(Aug 21, 2003)

Microsoft Confidential

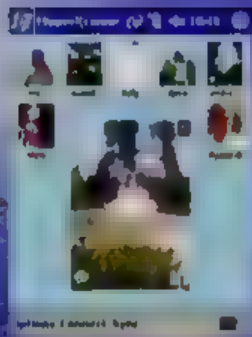
Project Overview

Project Overview

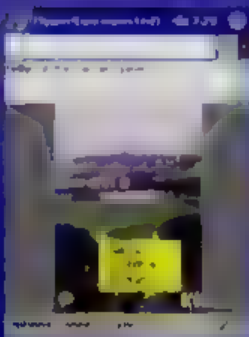
Use of Flipper for pocket po phones

Usage and its impact on connectedness,
enjoyment

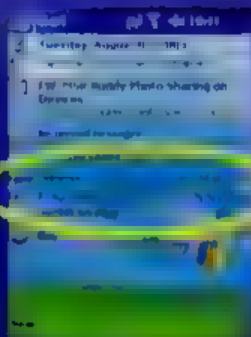
Demo



Home screen

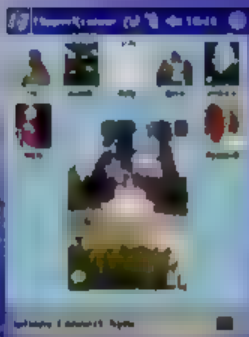


Full view



Integration
with Today's
Screen

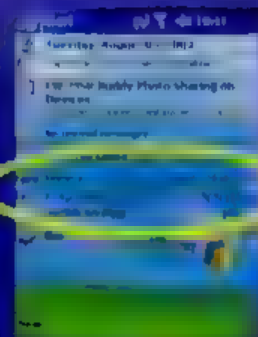
Demo



Home screen

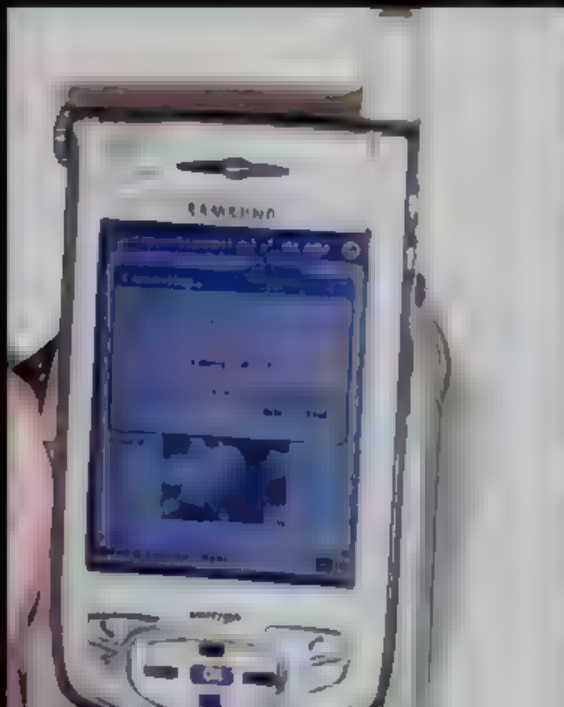


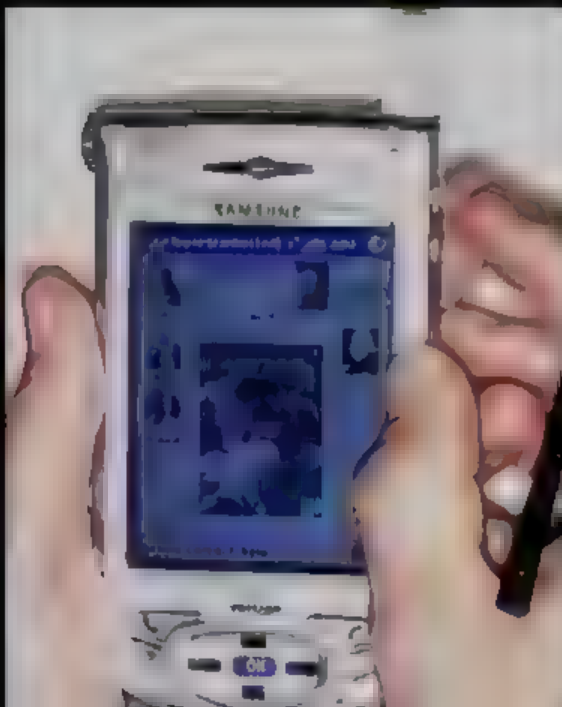
Full view

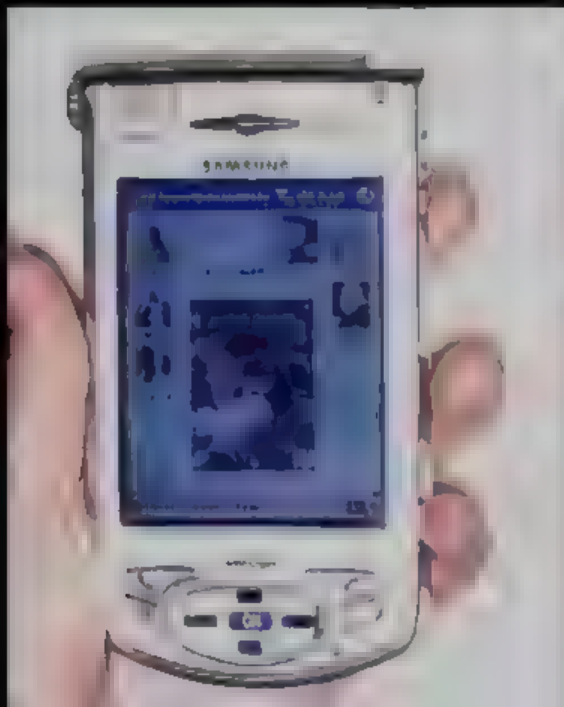


Integration
with Today
screen

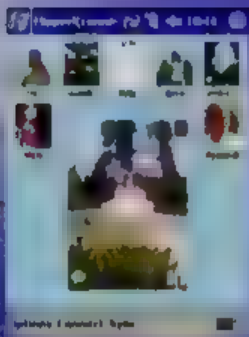




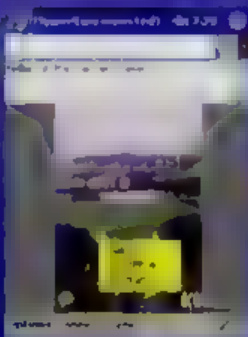




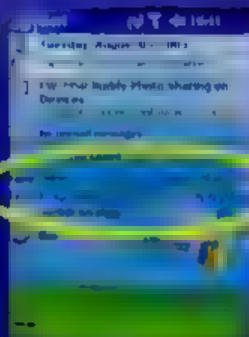
Demo



Home screen



Full view



Integration
with Today's
Screen

Implementation

• **Platform:** Java, .NET, PHP, Python, Perl, Ruby, etc.

• **Backend framework with C#, content management, minutes, mobile and desktop**

• **Specific issues:** E.g., slow & intermittent internet connectivity, limited processing speed

Implementation

- **Simple framework with C#; content updates in minutes, mobile and desktop**

- **Specific issues: E.g., slow & intermittent internet connectivity, limited processing speed**

Desktop v. Mobile Contz

- Desktop: more formal, less immediate
- Desktop: more structured, less spontaneous
- Desktop: more controlled, less expressive
- Desktop: more professional, less personal

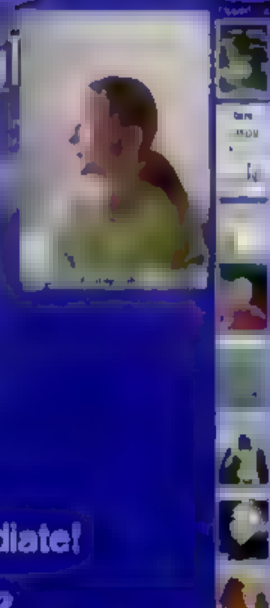
Overall: more informal, immediate!

Better sense of life presence?



Desktop v. Mobile

- Desktop: more formal, less immediate
- Mobile: more informal, more immediate
- Desktop: more structured, less spontaneous
- Mobile: more spontaneous, less structured



Overall: more informal, immediate!

Better sense of life presence?

Not sure, but it's a good idea to try it out!

It's a good idea to try it out! It's a good idea to try it out! It's a good idea to try it out! It's a good idea to try it out! It's a good idea to try it out!

Desktop v. Mobile

- Desktop is more formal, more structured
- Desktop is more professional
- Desktop is more organized
- Desktop is more secure



Overall more informal, immediate!

Better sense of life presence?



Field Study

- **Equipment:** digital camera phone
- **App:** Desktop Flipper

Behavioral: photo sharing, viewing, commenting

Subjective: sense of connectedness, group cohesion,

feeling of being social, enjoyment

Results

Participation by mobile users

	Desktop users	Mobile and desktop users	
		Total	Mobile only
Photos shared	11 (11)	19 (7)	13 (6)
Comments	3 (3)	6 (5)	1 (1)

11 = 20 photos in one week

Summary & Next Steps

1. [Summary of findings](#) 2. [Conclusions](#) 3. [Limitations](#) 4. [Future research](#)

- [Photographs](#): how/why fade photos over time
- [Metadata](#): grouping for more specific authoring
- [Additional studies](#): deployment!



Peripheral Social Awareness and Smart Convergence



Microsoft Confidential

Smart Mobs

... ..
... ..
... ..

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SWARM Goals

- **Adaptability**
 - **Adaptability** to changing environments
 - **Adaptability** to changing tasks
 - **Adaptability** to changing resources
- **Scalability**
 - **Scalability** to changing numbers of agents
 - **Scalability** to changing tasks
 - **Scalability** to changing resources
- **Robustness**
 - **Robustness** to changing environments
 - **Robustness** to changing tasks
 - **Robustness** to changing resources
- **Efficiency**
 - **Efficiency** to changing environments
 - **Efficiency** to changing tasks
 - **Efficiency** to changing resources
- **Interactivity**
 - **Interactivity** to changing environments
 - **Interactivity** to changing tasks
 - **Interactivity** to changing resources
- **Not interruptive, but not mobile**



Swarm

Swarm is a distributed system for coordinating a group of agents. It is designed to be simple, flexible, and scalable. The system is based on a set of principles that guide the behavior of the agents. These principles are: simplicity, flexibility, and scalability. The system is designed to be simple, flexible, and scalable. The system is based on a set of principles that guide the behavior of the agents. These principles are: simplicity, flexibility, and scalability.





Architecture



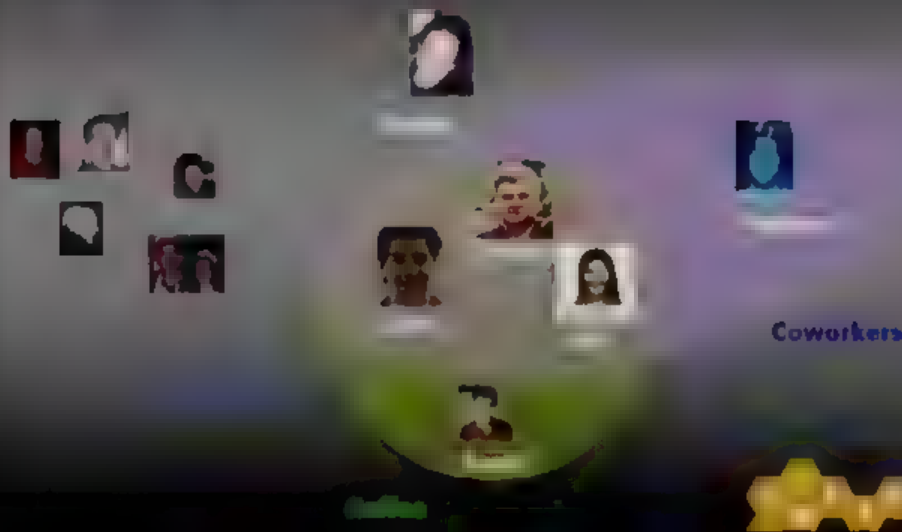
Shelly's Groups



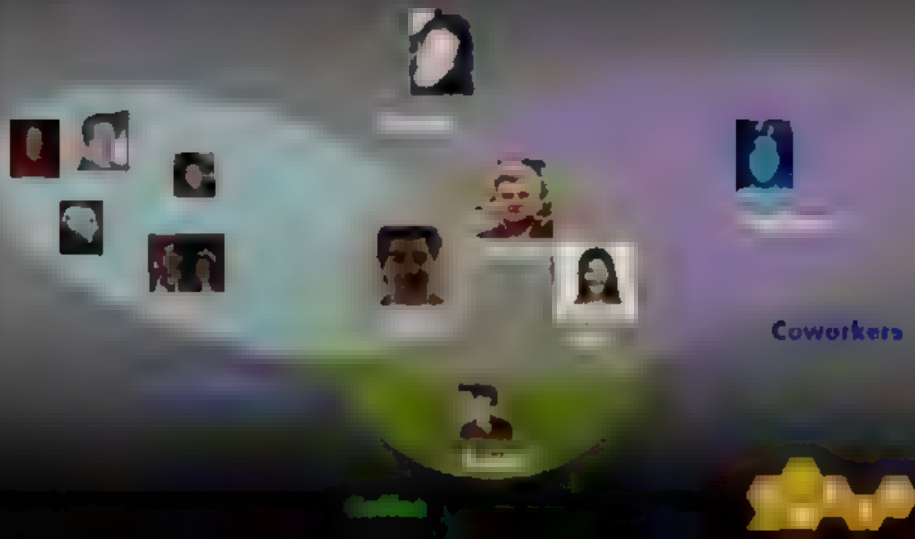
Coworkers



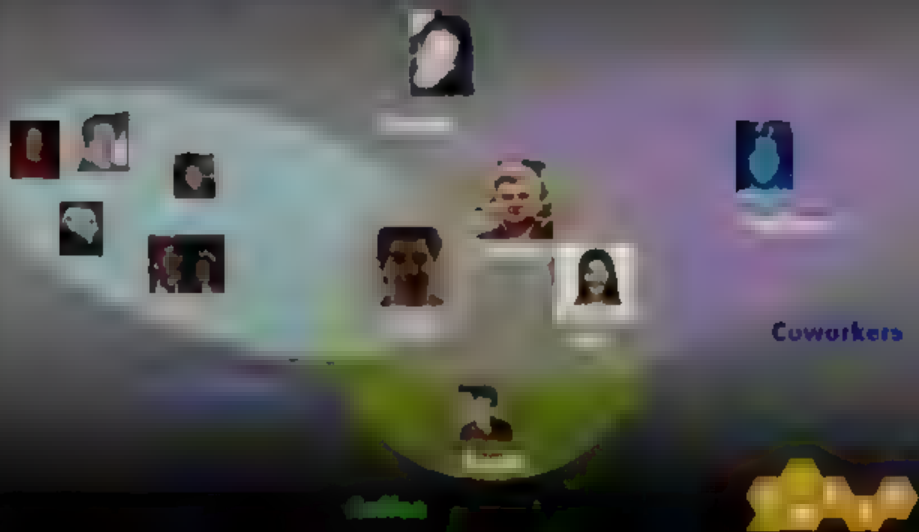
Shelly's Groups



Shelly's Groups



Shelly's Groups



Scenario



Sends + Add Pedro
16 508 137747 to coffee>



Scenario



Send < Add Padam
16308237747 to coffee>



Scenario



Sends <Coffee <coffee?> to wmain



Scenario



12:00 PM

Sends «Coffee coffee?» to person



Receives «Shelly coffee»



Scenario



sends <coffee caffeine?> to swarm



receives <shelly caffeine?>



Scenario



Sends - Olive Pedron
coffee - to swim

Receives - Shelly gave you
coffee - coffee



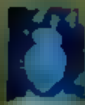
Scenario



sends <coffee + caffeine?> to warm



receives <shelly + caffeine?>



Commands

Update

Roll (<group>)



Measuring Success



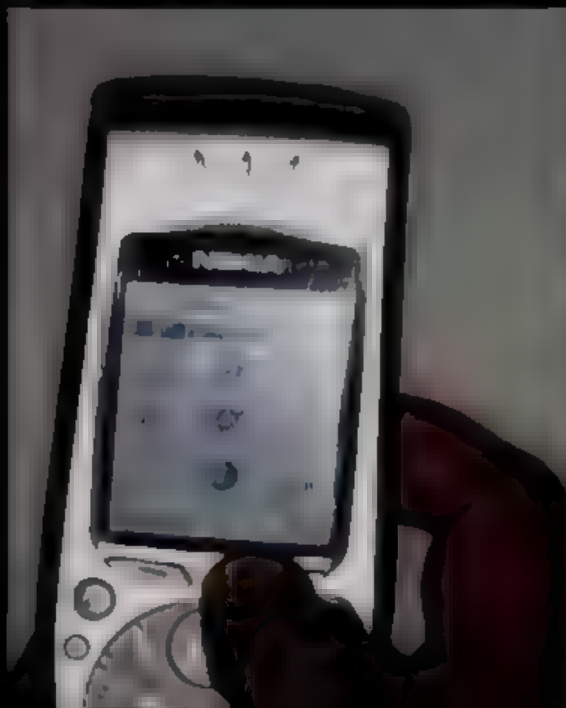
Summary & Next Steps

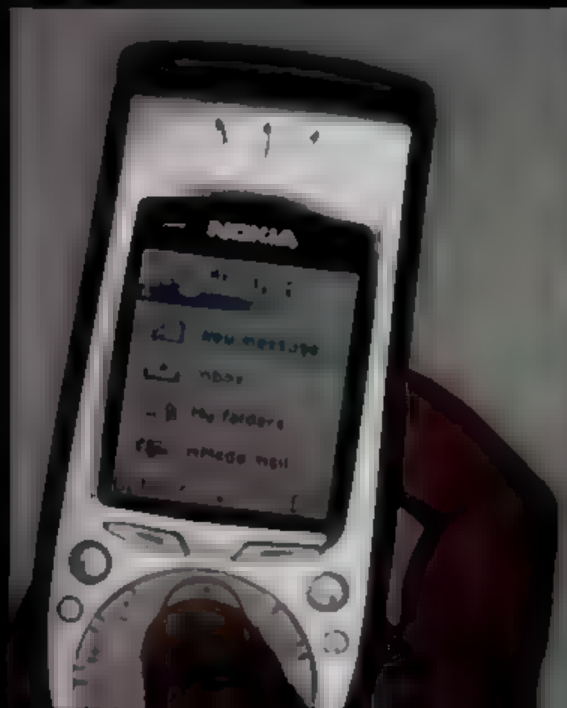
- The first step is to identify the problem and the people involved.
- Next, we need to gather information and understand the context.
- Then, we should analyze the data and identify the root causes.
- After that, we can develop a plan and implement the solution.
- Finally, we need to monitor the progress and evaluate the results.

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Canopus

Navigating the Blogosphere

Meredith Pinkelstein, NYU

Sean Kelly

Computing Group, NYU

Aug 21, 2002

Problems in Blogging

There are so many blogs out there,
how can I discover blogs I care about?

It takes too much time to read my blogs,
how do I skim through them?

My blog comments get lost,
how can I have a conversation around a post?

Canopus Solution

Find, Read, Converse

- Find blogs through your friends' social network
- Poll blogs and read them on your desktop
- Converse with your social network around a post
- Use syndication (RSS) and Weblog APIs





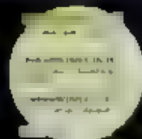
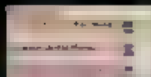
Let's Group Together our Good Blogs

Compare blogs with the top 5 blog engines added to your account
Share your favorite or favorite for groups of blogs that - and that's what blogs

add a unique group of blogs that you can share with your

and a new post of your content

- Converse with your social network around a post
- Use syndication (RSS) and Weblog APIs





Don't miss a beat on our daily news

Subscribe now with the best thing going on in your network.

Search your network of friends for groups of blogs that read and read blogs.

Add and manage blogs of blogs that are popular to you.

Keep track of all the latest news.

- Poll blogs and read them on your desktop
- Converse with your social network around a post
- Use syndication (RSS) and Weblog API



My blog	100
My blog	100
My blog	100
My blog	100
My blog	100

My blog	100
My blog	100
My blog	100
My blog	100
My blog	100

My blog	100
My blog	100
My blog	100
My blog	100
My blog	100





- Poll blogs and read them on your desktop
- Converse with your social network around a post
- Use syndication (RSS) and Weblog APIs





本館代印 每部定價 肆元 郵費 貳角 函購 另加 郵費

*h- is a matter of opinion

• **अनुसंधान** •

• **ΔΑ ΔΕ ΠΑΙΣ**

4. *Journal of the American Medical Association*, 1997; 277: 1033-1037.

Abstract Background:

2014年12月10日

Features of the Study

● 2019年10月1日起，中国公民持普通护照免签入境国家增至54个。

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'Three-Toed Sloth

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August 14, 2003

1. The first part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1) as $t \rightarrow \infty$. It is shown that the solutions of the system (1) are bounded and tend to zero as $t \rightarrow \infty$ if the matrix A is stable. The second part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1) as $t \rightarrow \infty$ if the matrix A is not stable. It is shown that the solutions of the system (1) are unbounded and tend to infinity as $t \rightarrow \infty$ if the matrix A is not stable.

[illegible]

$E_{\mu\nu} = \frac{1}{2}(\partial_\mu \phi \partial_\nu \phi - \partial_\nu \phi \partial_\mu \phi) + \frac{1}{2}(\partial_\mu \psi \partial_\nu \psi - \partial_\nu \psi \partial_\mu \psi)$

مجلس شورای اسلامی

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

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is

Windows XP is the new standard.



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File Edit View Favorites Tools Help

File Edit View Favorites Tools Help

Address Book Favorites

File Edit View Favorites Tools Help





Canonius Solution

Abstract

116 മിസ്സർ മിസ്സർ

1980年1月1日

15. 6/14/2014 12:41

www.pearsoned.com.au

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Field Notes 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 104

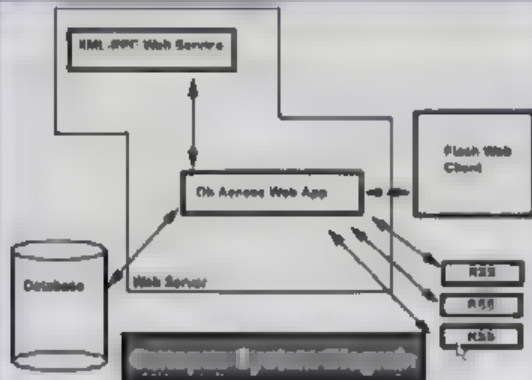
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• 5000 + 10000 = 15000

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The Canopus System



User Syndication (RSS
and Weblog API)

Browser RSS promotion
management

Content syndication

Next for Canopus

- ▶ Integrate UI with social network (Wallop)
- ▶ User Testing
- ▶ Explore making a Peer Net Application

Endless
Email: seankell@publiccosine.com

User Organization

- o Organization is too much work
- o Single rigid hierarchy doesn't match how people think
- o Sapphire Approach:
 - Use database instead
 - Build UI around *Properties*
- o Prototypes, studies run on XP & Longhorn
- o Collaboration with Windows Storage team

Property-Based Organization

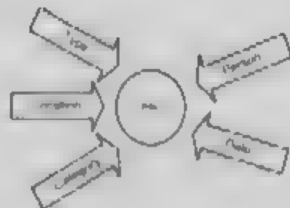
Today:

- Authored organization
- Separate stores (local, shares, email)
- Single hierarchy per store



New Approach:

- Automatic *and* authored organization
- Integrated stores
- Multiple overlapping sets based on properties



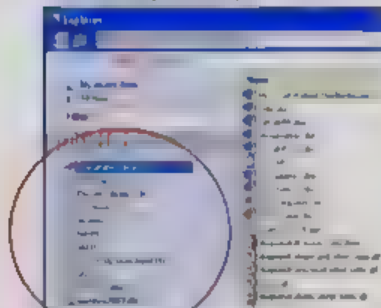
Study 1: Hierarchy & Migration

- Hand-selected key properties
 - Type, Category, People, Date
- With and without hierarchy
- Integrated store (local computer, shares, email)

Flat presentation

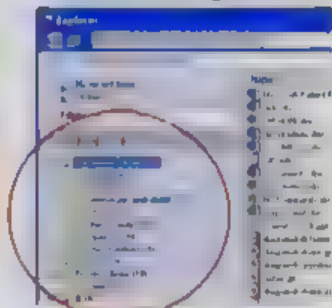
Ordered by recency

14



Hierarchical presentation

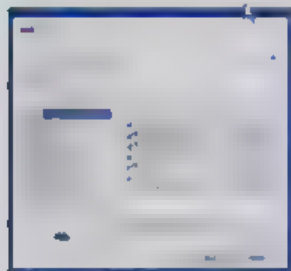
Adaptive ordering



Study 1: "Save As.." Prototype

Full View:

- o Emphasis on categories
- o Show category contents

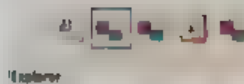


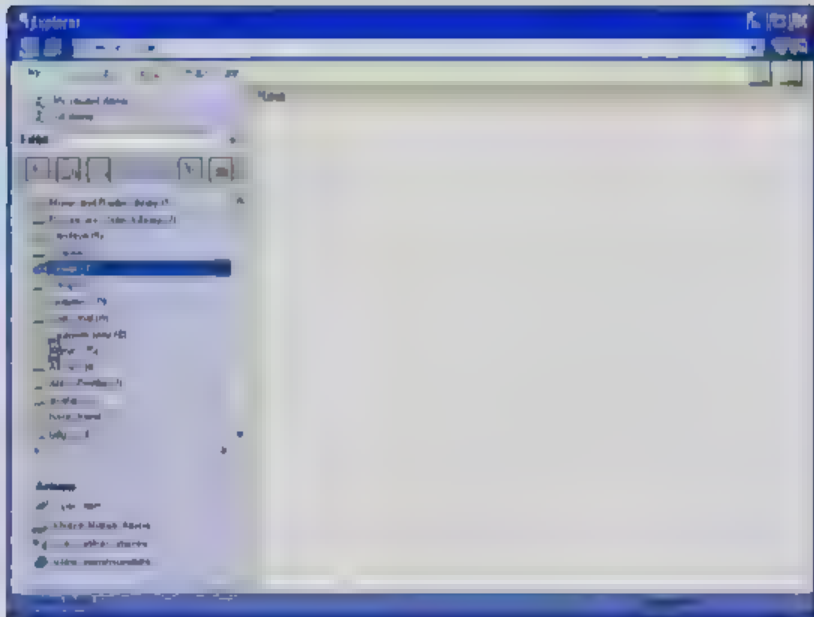
Minimal / Default View:

- o Key properties emphasized equally
- o Drop-downs & auto-complete



Demo





1. **Project Explorer**

- Project: **MyProject**
- Source Files:
 - src
 - test
- Libraries:
 - lib

2. **Package Explorer**

- Package: **com.example.project**
- Class: **Main**

3. **Code Editor**

```
package com.example.project;

import java.util.*;

public class Main {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter a number:");
        int n = scanner.nextInt();
        scanner.close();

        // Your logic here
    }
}
```

4. **Run Console**

Run Configuration: **Run**

Output:

```
Enter a number:
5
5
```


Microsoft

Insert

Format

Tools

Window

Help

As I was saying this is cool

the left you find your left side window bar

6

Save As

Name:

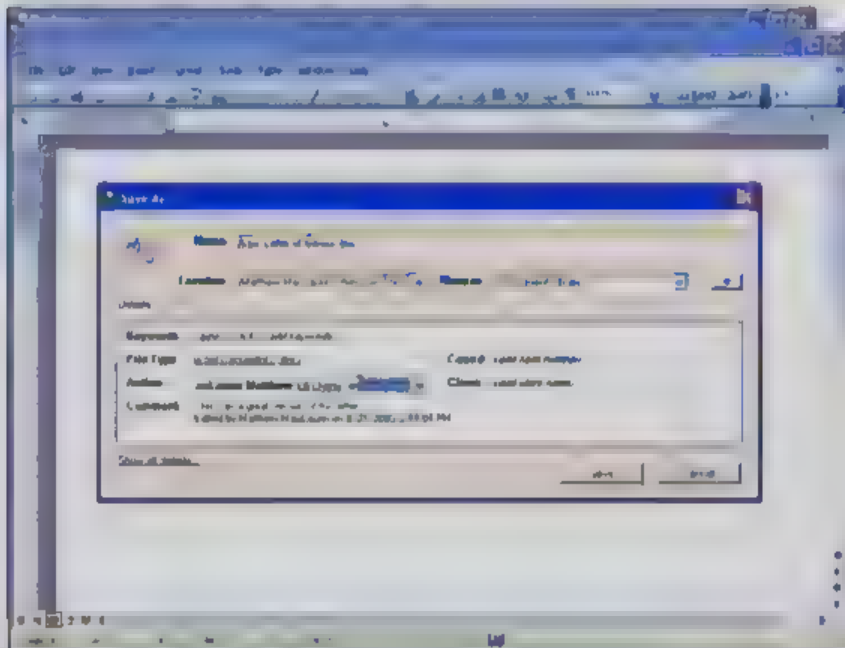
Location:

Keywords:

File Type:

Author:

Comments:



Study 1 Results

- 8 Intermediate Internals (Melissa/Patrick)
- Real data; Sapphire on XP

■ Good news for finding

Finding is great. All find tasks solved quickly.

8/8 use type and word wheel

4/7 ask to keep the prototype

7/7 actual order to XP matches

No significant "folder concern" for finding.

6/7 People prefer hierarchy

○ Issues with saving

People want familiarity.

6/7 want folders in save as

...Even though they didn't use them for retrieval

○ Users want to author sets

Integrate Authored and Automatic sets

Want simple, consistent concepts

Study 2: Groups & Authored Lists

- Integrate authored & automatic sets
- Users want to group stuff
- Simple list concept
 - Single-purpose
 - Easily accessible
- Exploratory group UI
 - Stacks
 - Squeezed lists

Study 2: Groups & Authored Lists

The screenshot displays a Moodle LMS interface. The top navigation bar includes the Moodle logo and the text 'Moodle Moodle Platform'. Below this is a search bar and a user profile icon. The main content area is divided into two sections: a left sidebar and a main content area.

Details Sidebar:

- Details:** A section containing a small image and a list of details.
- Contents:** A section containing a list of items with columns for 'Name', 'Status', and 'Date'.

Main Content Area:

- Item 1:** A section titled 'Item 1 (1 of 1)' containing a list of items.
- Item 2:** A section titled 'Item 2 (1 of 1)' containing a list of items.
- Item 3:** A section titled 'Item 3 (1 of 1)' containing a list of items.

The interface is designed for managing course content and user interactions. The 'Details' sidebar provides information about the current item, while the 'Contents' section lists all items in the course. The main content area displays the details of the selected item, including a list of items and their status.

Desktop



My Computer

(C:\Windows\My Computer)

My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)

Music & Video

My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)

Picture

My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)
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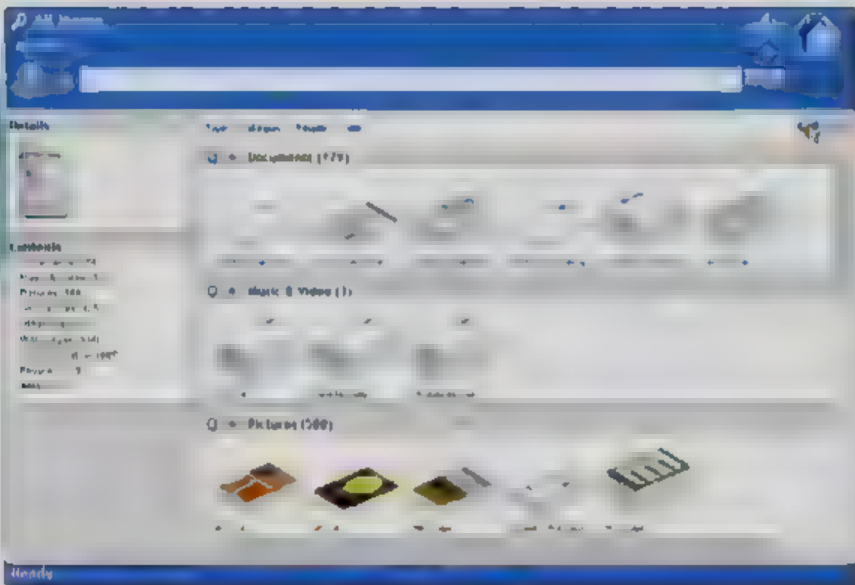
My Computer (C:\Windows\My Computer)

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My Computer (C:\Windows\My Computer)
My Computer (C:\Windows\My Computer)

Music & Video

My Computer (C:\Windows\My Computer)

My Computer (C:\Windows\My Computer)



Start



Documents

Documents (10)

- 1. ...
- 2. ...
- 3. ...
- 4. ...
- 5. ...
- 6. ...
- 7. ...
- 8. ...
- 9. ...
- 10. ...

Recent Files (5)

- 1. ...
- 2. ...
- 3. ...
- 4. ...
- 5. ...

Recent Folders (5)

- 1. ...
- 2. ...
- 3. ...
- 4. ...
- 5. ...

Recent Files (10)

File Edit View Favorites Tools Help

Documents

Documents (10)

File Name	Size	Date Modified
...
...
...
...
...
...
...
...
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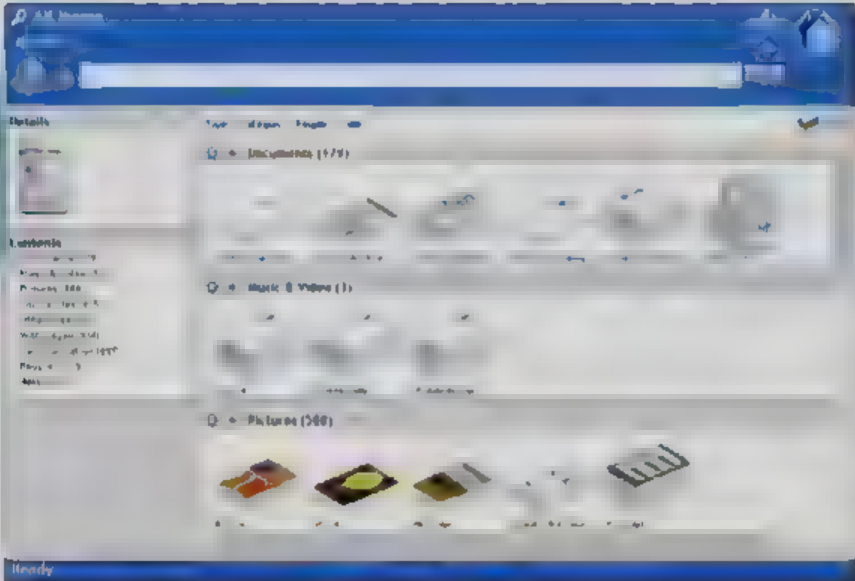
Recent Files (5)

File Name	Size	Date Modified
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...
...
...
...

Recent Folders (5)

Folder Name	Size	Date Modified
...
...
...
...
...

Recent Files (10)





Start

File Edit View Favorites Tools Help

File Explorer Library (39)

Address bar

Address bar
14000 1 2 3 4 5 6
File Edit View
Address bar
14000 1 2 3 4 5 6
File Edit View
14000 1 2 3 4 5 6
File Edit View

Desktop (1)

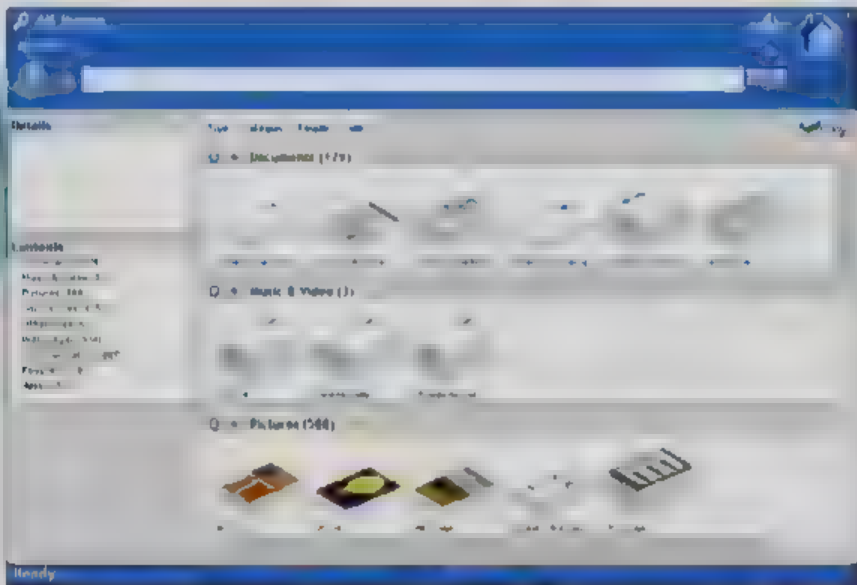
Desktop (1)

My Recent Places (4)

My Recent Places (4)

My Recent Places (4)

Windows



Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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▶ ● 2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2190-2191-2192-2193-2194-2195-2196-2197-2198-2199-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2356-2357-2358-2359-2360-2361-2362-2363-2364-2365-2366-2367-2368-2369-2370-2371-2372-2373-2374-2375-2376-2377-2378-2379-2380-2381-2382-2383-2384-2385-2386-2387-2388-2389-2390-2391-2392-2393-2394-2395-2396-2397-2398-2399-2400-2401-2402-2403-2404-2405-2406-2407-2408-2409-2410-2411-2412-2413-2414-2415-2416-2417-2418-2419-2420-2421-2422-2423-2424-2425-2426-2427-2428-2429-2430-2431-2432-2433-2434-2435-2436-2437-2438-2439-2440-2441-2442-2443-2444-2445-2446-2447-2448-2449-2450-2451-2452-2453-2454-2455-2456-2457-2458-2459-2460-2461-2462-2463-2464-2465-2466-2467-2468-2469-2470-2471-2472-2473-2474-2475-2476-2477-2478-2479-2480-2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-2637-2638-2639-2640-2641-2642-2643-2644-2645-2646-2647-2648-2649-2650-2651-2652-2653-2654-2655-2656-2657-2658-2659-2660-2661-2662-2663-2664-2665-2666-2667-2668-2669-2670-2671-2672-2673-2674-2675-2676-2677-2678-2679-2680-2681-2682-2683-2684-2685-2686-2687-2688-2689-2690-2691-2692-2693-2694-2695-2696-2697-2698-2699-2700-2701-2702-2703-2704-2705-2706-2707-2708-2709-2710-2711-2712-2713-2714-2715-2716-2717-2718-2719-2720-2721-2722-2723-2724-2725-2726-2727-2728-2729-2730-2731-2732-2733-2734-2735-2736-2737-2738-2739-2740-2741-2742-2743-2744-2745-2746-2747-2748-2749-2750-2751-2752-2753-2754-2755-2756-2757-2758-2759-2760-2761-2762-2763-2764-2765-2766-2767-2768-2769-2770-2771-2772-2773-2774-2775-2776-2777-2778-2779-2780-2781-2782-2783-2784-2785-2786-2787-2788-2789-2790-2791-2792-2793-2794-2795-2796-2797-2798-2799-2800-2801-2802-2803-2804-2805-2806-2807-2808-2809-2810-2811-2812-2813-2814-2815-2816-2817-2818-2819-2820-2821-2822-2823-2824-2825-2826-2827-2828-2829-2830-2831-2

$\Delta = \begin{vmatrix} 1 & 1 & 1 \\ 1 & 2 & 3 \\ 1 & 4 & 9 \end{vmatrix} = 1(18-16) - 1(9-9) + 1(8-4) = 2$
 $\Delta_1 = \begin{vmatrix} 1 & 1 \\ 1 & 2 \end{vmatrix} = 1(2-1) = 1$
 $\Delta_2 = \begin{vmatrix} 1 & 1 \\ 1 & 4 \end{vmatrix} = 1(4-1) = 3$
 $\Delta_3 = \begin{vmatrix} 1 & 2 \\ 1 & 9 \end{vmatrix} = 1(9-2) = 7$
 $x = \frac{\Delta_1}{\Delta} = \frac{1}{2}$
 $y = \frac{\Delta_2}{\Delta} = \frac{3}{2}$
 $z = \frac{\Delta_3}{\Delta} = \frac{7}{2}$

[illegible]

7. \rightarrow $\text{H}_2\text{O} = \text{smaller}$ Molar mass of H_2O compared to H_2S

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$
 $\frac{1}{16} \times \frac{1}{16} = \frac{1}{256}$

1. $\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$
 2. $\frac{d}{dx} x^3 = 3x^2$
 3. $\frac{d}{dx} x^5 = 5x^4$
 4. $\frac{d}{dx} x^{-1} = -x^{-2} = -\frac{1}{x^2}$
 5. $\frac{d}{dx} x^{\frac{1}{2}} = \frac{1}{2}x^{-\frac{1}{2}} = \frac{1}{2\sqrt{x}}$
 6. $\frac{d}{dx} x^{\frac{3}{4}} = \frac{3}{4}x^{-\frac{1}{4}} = \frac{3}{4\sqrt[4]{x}}$
 7. $\frac{d}{dx} x^{\frac{2}{3}} = \frac{2}{3}x^{-\frac{1}{3}} = \frac{2}{3\sqrt[3]{x}}$
 8. $\frac{d}{dx} x^{\frac{5}{6}} = \frac{5}{6}x^{-\frac{1}{6}} = \frac{5}{6\sqrt[6]{x}}$
 9. $\frac{d}{dx} x^{\frac{7}{8}} = \frac{7}{8}x^{-\frac{1}{8}} = \frac{7}{8\sqrt[8]{x}}$
 10. $\frac{d}{dx} x^{\frac{9}{10}} = \frac{9}{10}x^{-\frac{1}{10}} = \frac{9}{10\sqrt[10]{x}}$
 11. $\frac{d}{dx} x^{\frac{11}{12}} = \frac{11}{12}x^{-\frac{1}{12}} = \frac{11}{12\sqrt[12]{x}}$
 12. $\frac{d}{dx} x^{\frac{13}{14}} = \frac{13}{14}x^{-\frac{1}{14}} = \frac{13}{14\sqrt[14]{x}}$
 13. $\frac{d}{dx} x^{\frac{15}{16}} = \frac{15}{16}x^{-\frac{1}{16}} = \frac{15}{16\sqrt[16]{x}}$
 14. $\frac{d}{dx} x^{\frac{17}{18}} = \frac{17}{18}x^{-\frac{1}{18}} = \frac{17}{18\sqrt[18]{x}}$
 15. $\frac{d}{dx} x^{\frac{19}{20}} = \frac{19}{20}x^{-\frac{1}{20}} = \frac{19}{20\sqrt[20]{x}}$
 16. $\frac{d}{dx} x^{\frac{21}{22}} = \frac{21}{22}x^{-\frac{1}{22}} = \frac{21}{22\sqrt[22]{x}}$
 17. $\frac{d}{dx} x^{\frac{23}{24}} = \frac{23}{24}x^{-\frac{1}{24}} = \frac{23}{24\sqrt[24]{x}}$
 18. $\frac{d}{dx} x^{\frac{25}{26}} = \frac{25}{26}x^{-\frac{1}{26}} = \frac{25}{26\sqrt[26]{x}}$
 19. $\frac{d}{dx} x^{\frac{27}{28}} = \frac{27}{28}x^{-\frac{1}{28}} = \frac{27}{28\sqrt[28]{x}}$
 20. $\frac{d}{dx} x^{\frac{29}{30}} = \frac{29}{30}x^{-\frac{1}{30}} = \frac{29}{30\sqrt[30]{x}}$
 21. $\frac{d}{dx} x^{\frac{31}{32}} = \frac{31}{32}x^{-\frac{1}{32}} = \frac{31}{32\sqrt[32]{x}}$
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 23. $\frac{d}{dx} x^{\frac{35}{36}} = \frac{35}{36}x^{-\frac{1}{36}} = \frac{35}{36\sqrt[36]{x}}$
 24. $\frac{d}{dx} x^{\frac{37}{38}} = \frac{37}{38}x^{-\frac{1}{38}} = \frac{37}{38\sqrt[38]{x}}$
 25. $\frac{d}{dx} x^{\frac{39}{40}} = \frac{39}{40}x^{-\frac{1}{40}} = \frac{39}{40\sqrt[40]{x}}$
 26. $\frac{d}{dx} x^{\frac{41}{42}} = \frac{41}{42}x^{-\frac{1}{42}} = \frac{41}{42\sqrt[42]{x}}$
 27. $\frac{d}{dx} x^{\frac{43}{44}} = \frac{43}{44}x^{-\frac{1}{44}} = \frac{43}{44\sqrt[44]{x}}$
 28. $\frac{d}{dx} x^{\frac{45}{46}} = \frac{45}{46}x^{-\frac{1}{46}} = \frac{45}{46\sqrt[46]{x}}$
 29. $\frac{d}{dx} x^{\frac{47}{48}} = \frac{47}{48}x^{-\frac{1}{48}} = \frac{47}{48\sqrt[48]{x}}$
 30. $\frac{d}{dx} x^{\frac{49}{50}} = \frac{49}{50}x^{-\frac{1}{50}} = \frac{49}{50\sqrt[50]{x}}$
 31. $\frac{d}{dx} x^{\frac{51}{52}} = \frac{51}{52}x^{-\frac{1}{52}} = \frac{51}{52\sqrt[52]{x}}$
 32. $\frac{d}{dx} x^{\frac{53}{54}} = \frac{53}{54}x^{-\frac{1}{54}} = \frac{53}{54\sqrt[54]{x}}$
 33. $\frac{d}{dx} x^{\frac{55}{56}} = \frac{55}{56}x^{-\frac{1}{56}} = \frac{55}{56\sqrt[56]{x}}$
 34. $\frac{d}{dx} x^{\frac{57}{58}} = \frac{57}{58}x^{-\frac{1}{58}} = \frac{57}{58\sqrt[58]{x}}$
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 36. $\frac{d}{dx} x^{\frac{61}{62}} = \frac{61}{62}x^{-\frac{1}{62}} = \frac{61}{62\sqrt[62]{x}}$
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 39. $\frac{d}{dx} x^{\frac{67}{68}} = \frac{67}{68}x^{-\frac{1}{68}} = \frac{67}{68\sqrt[68]{x}}$
 40. $\frac{d}{dx} x^{\frac{69}{70}} = \frac{69}{70}x^{-\frac{1}{70}} = \frac{69}{70\sqrt[70]{x}}$
 41. $\frac{d}{dx} x^{\frac{71}{72}} = \frac{71}{72}x^{-\frac{1}{72}} = \frac{71}{72\sqrt[72]{x}}$
 42. $\frac{d}{dx} x^{\frac{73}{74}} = \frac{73}{74}x^{-\frac{1}{74}} = \frac{73}{74\sqrt[74]{x}}$
 43. $\frac{d}{dx} x^{\frac{75}{76}} = \frac{75}{76}x^{-\frac{1}{76}} = \frac{75}{76\sqrt[76]{x}}$
 44. $\frac{d}{dx} x^{\frac{77}{78}} = \frac{77}{78}x^{-\frac{1}{78}} = \frac{77}{78\sqrt[78]{x}}$
 45. $\frac{d}{dx} x^{\frac{79}{80}} = \frac{79}{80}x^{-\frac{1}{80}} = \frac{79}{80\sqrt[80]{x}}$
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 53. $\frac{d}{dx} x^{\frac{95}{96}} = \frac{95}{96}x^{-\frac{1}{96}} = \frac{95}{96\sqrt[96]{x}}$
 54. $\frac{d}{dx} x^{\frac{97}{98}} = \frac{97}{98}x^{-\frac{1}{98}} = \frac{97}{98\sqrt[98]{x}}$
 55. $\frac{d}{dx} x^{\frac{99}{100}} = \frac{99}{100}x^{-\frac{1}{100}} = \frac{99}{100\sqrt[100]{x}}$
 56. $\frac{d}{dx} x^{\frac{101}{102}} = \frac{101}{102}x^{-\frac{1}{102}} = \frac{101}{102\sqrt[102]{x}}$
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 61. $\frac{d}{dx} x^{\frac{111}{112}} = \frac{111}{112}x^{-\frac{1}{112}} = \frac{111}{112\sqrt[112]{x}}$
 62. $\frac{d}{dx} x^{\frac{113}{114}} = \frac{113}{114}x^{-\frac{1}{114}} = \frac{113}{114\sqrt[114]{x}}$
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10 9 1000 (no answer) 4f.

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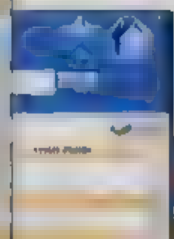
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My list (1)

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Uncommented (1)

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Microsoft Word (1)

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Microsoft Word Document (1)

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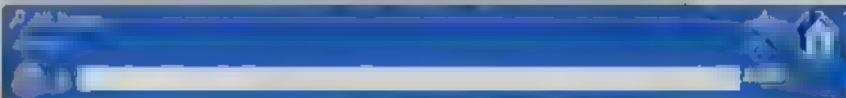
1. $\frac{1}{2}$
 2. $\frac{1}{3}$
 3. $\frac{1}{4}$
 4. $\frac{1}{5}$

A

B

C

D



††††† 11000-0000 4 3 0000

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities related to the project. It emphasizes the need for transparency and accountability in financial management.

2. The second part outlines the specific procedures for recording income and expenses. This includes detailed instructions on how to categorize different types of revenue and costs, ensuring they are correctly recorded in the accounting system.

3. The third section addresses the process of reconciling bank statements with internal records. It provides step-by-step guidance on identifying discrepancies and resolving them promptly to ensure the accuracy of the financial data.

4. Finally, the document concludes by stressing the role of regular audits in verifying the integrity of the financial information. It encourages the implementation of robust internal controls to prevent errors and fraud.

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→ • Water Throwing (4)

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Figure 7

© 2000 Blackwell Science Ltd *Journal of Internal Medicine* 247: 113–120

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Study 2 Results

L₂

- 7 novice externals (Abby/Melissa)
- Real data, Sapphire on XP
- Surprise: **everyone got lists**
 - 7/7 Understood linking semantics
 - 6/7 Predicted drag & drop behavior
 - 7/7 Predicted delete behavior
 - 7/7 Predicted dynamic list within static
 - 6/7 Valued overlapping lists
- **Everyone preferred to XP explorer**
 - Overall 6 of 7 for **confidence in finding**
 - Overall 5.9 of 7 Improvement over XP

Summary & Next Steps

- o Rapid prototyping & user studies:
 - Relieve product track risk
 - Explore hard issues
- o Continue joint studies & prototypes with Windows team
 - Migration
 - Organization concepts & set semantics
 - Sharing
- o Contact: *mattmac, andrzejt, scottlt, lilich*

If you want prototype

Summary & Next Steps

- o Rapid prototyping & user studies:
 - Relieve product track risk
 - Explore hard issues
- o Continue joint studies & prototypes with Windows team
 - Migration
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 - Sharing
- o Contact: *mattmac, andrzejt, scottlt, lilich*

if you want prototype

Automatically Generated Shared Spaces

Gregorz Zareba, Cezary Marcjan

Social Computing Group, MSR

Aug 21, 2003



- **Share a folder**
- **Share a folder before**
- **Set permissions**
- **Get e-mail about the share**

Many different methods of sharing

- Windows shared folders
- File shares
- Sharepoint
- Email, etc.

~~2000000000~~ Factor of suggested shares

Structure of a group mailbox

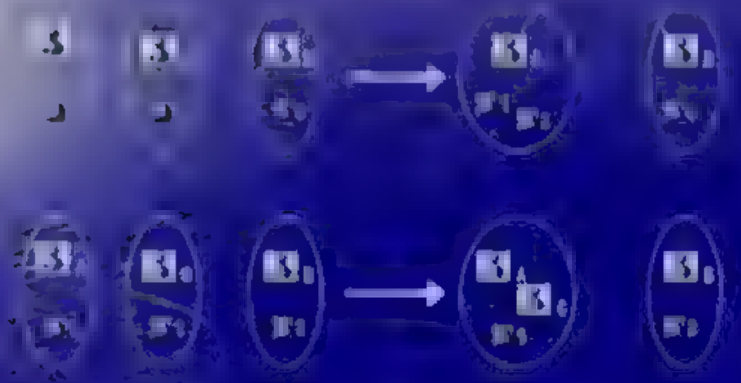
- Mailbox (aka group mailbox)
- People (aka group members)
- Documents (aka group documents)
- Messages (aka group messages)
- Folders: Sent and received messages

• **Mailbox**: unwanted items (undelivered messages, junk)

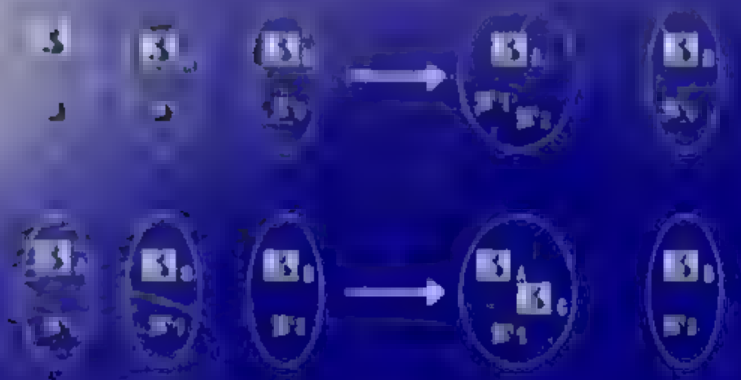
• **Registering people-docs groups**

- Combining groups with the same set of people
- Combining groups with the same set of docs (files)

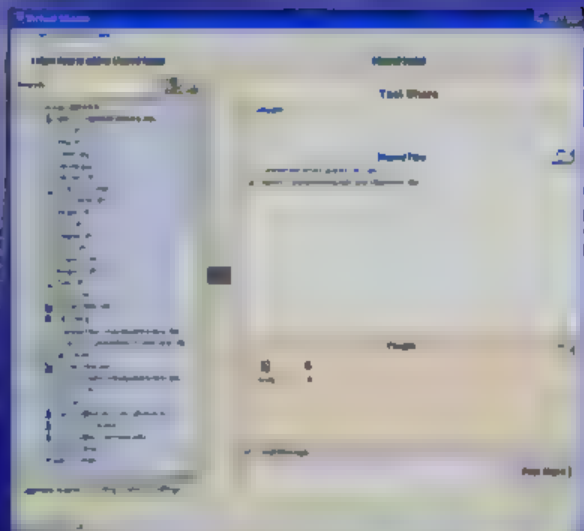
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Demo



Select item in cell in Shared Space

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70. Share no!

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99. Share no!

100. Share no!

Share no!

Share no!



Share no!



Share no!

Share no!

What's New to add to Shared Space

Shared Space

Share no 7

Share no 7

Shared File

Person Info

Full Name: [Name] | Email: [Email] | Phone: [Phone]

Address: [Address] | City: [City] | State: [State] | Zip: [Zip]

Occupation: [Occupation] | Education: [Education] | Experience: [Experience]

Skills: [Skills] | Languages: [Languages] | Certifications: [Certifications]

Interests: [Interests] | Hobbies: [Hobbies] | Sports: [Sports]

Emergency Contact: [Contact] | Medical History: [History] | Allergies: [Allergies]

Notes: [Notes]

Print View

Account Settings | Profile | Logout

3 sheet paper to add to Shared Space

Shared Space

Step 1/6



1. Copy, P.O. T.
2. Custom copy 1
3. Copying copy
4. Custom copy 2
5. Copying copy
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Page 1/1000 (1/1000) 1/1000

Share no T

Shared File

1. Shared File
2. Shared File
3. Shared File
4. Shared File

People

1. People
2. People

1. People
2. People

Peer Group

Subject Map to add to Shared Space

Wrote by



- 1. Map 2017
- 2. Map 2017
- 3. Map 2017
- 4. Map 2017
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- 7. Map 2017
- 8. Map 2017
- 9. Map 2017
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- 99. Map 2017
- 100. Map 2017

Map 2017

Shared Space

Share no 7

Comment

Shared Space

Shared Space

People

Map 2017

Post Story

Creators

Sample Map to edit in Sample Editor

Map of NY



- 1. Sample ID: 1
- 2. Sample Name: 1
- 3. Sample Type: 1
- 4. Sample Date: 1
- 5. Sample Time: 1
- 6. Sample Location: 1
- 7. Sample Status: 1
- 8. Sample Notes: 1
- 9. Sample Photo: 1
- 10. Sample Map: 1
- 11. Sample Data: 1
- 12. Sample Results: 1
- 13. Sample Comments: 1
- 14. Sample History: 1
- 15. Sample Settings: 1
- 16. Sample Reports: 1
- 17. Sample Tools: 1
- 18. Sample Help: 1
- 19. Sample About: 1
- 20. Sample Exit: 1

Sample Editor: Sample ID: 1, Sample Name: 1, Sample Type: 1

Sample Editor

Sample ID: 1

Sample Name

Sample Type

Sample Date
Sample Time
Sample Location
Sample Status

Sample Notes

Sample Photo
Sample Map

Sample Data

Sample Results

Print Map

1. **Installation**

2. **Configuration**

3. **Deployment**

4. **Support**

Instant Meeting Preparation

Will Portnoy, Shelly Farnham,
Dave Myron, Lili Cheng
Global Computing Group, MSR
Aug 21, 2003

Instant Meeting Preparation

Bill Portnoy, Shelly Farnham,
Dave Myron, Lit Cheng
Social Computing Group, MSR
Aug 21, 2003

One Page Instant Meeting Prep

- One page meeting prep in few minutes with known people
- One page prep generates a one printed page that you take to the meeting
 - Personalized by your
 - Relationship to other attendees
 - Relevant communications and documents
 - Location (map from your location to meeting)
- Aggregate user's public and private data

Background

- Personal-Map-Previewer tool
 - Automatically organizing items (e.g., documents, etc.)
 - Starting point for exploring social network (typically in relation to "me")
 - Personal-Map-Outlook Integration (inline with your communication tools)

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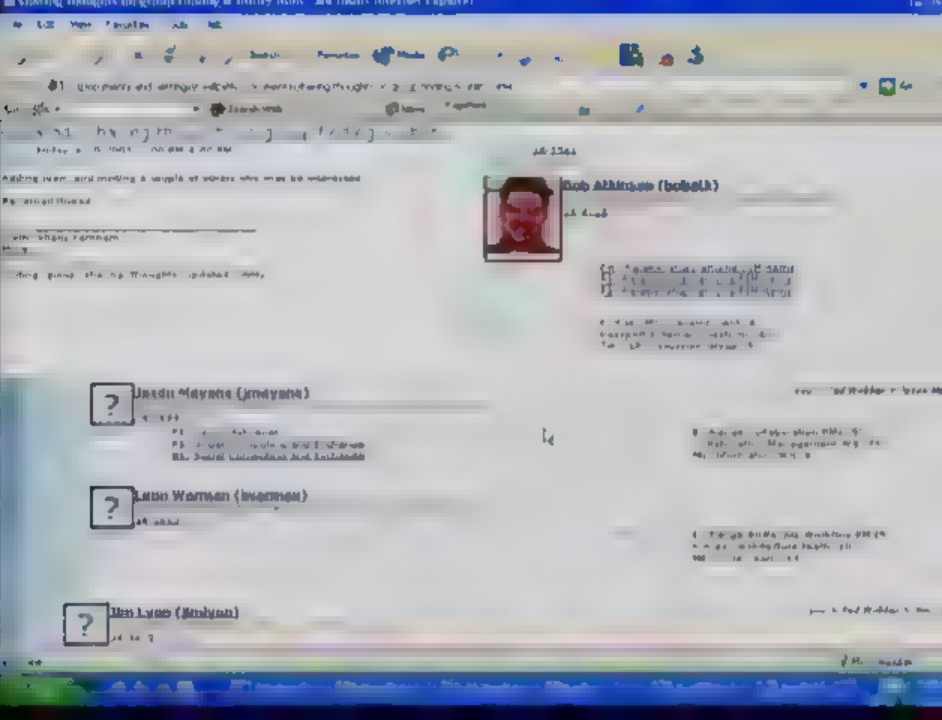
...

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File Edit View Format Tools Help

File Edit View Format Tools Help



Miro Lajani (mirolajani)

44 2020

File Edit View Format Tools Help

File Edit View Format Tools Help



Miro Lajani (mirolajani)

44 2020

File Edit View Format Tools Help

File Edit View Format Tools Help



Andrej Lajani (andrejlajani)

44 2020

File Edit View Format Tools Help

File Edit View Format Tools Help

File Edit View Format Tools Help



Miro Lajani (mirolajani)

44 2020

File Edit View Format Tools Help

File Edit View Format Tools Help

File Edit View Format Tools Help


$$H^1(X, \mathcal{O}_X) \cong H^1(X, \mathcal{O}_X) \oplus H^1(X, \mathcal{O}_X) \oplus \dots \oplus H^1(X, \mathcal{O}_X) \oplus H^1(X, \mathcal{O}_X) \oplus \dots \oplus H^1(X, \mathcal{O}_X) \oplus H^1(X, \mathcal{O}_X) \oplus \dots$$

[Back](#)
[Home](#)
[Search](#)
[Help](#)

about 1000 ft. in diameter.

[illegible]

18-304

[illegible]

For the first time, the report

WIRTSCHAFTS- UND VERKEHRSWISSENSCHAFTEN

[illegible]

Group Activities (continued)

المؤلفون

[illegible]

1. 在 1990 年 1 月 1 日以前，
 2. 在 1990 年 1 月 1 日以后，
 3. 在 1990 年 1 月 1 日以后，



David Lawrence (1904-1968)

有 十餘年

பெரிய அளவுக்குள்ளேயே இருக்கிறார்கள். இதைப் பற்றி நான் சொல்ல விரும்புகிறேன். இதைப் பற்றி நான் சொல்ல விரும்புகிறேன். இதைப் பற்றி நான் சொல்ல விரும்புகிறேன்.



James Wattson (Inventor)

[illegible]

Mr. Lytle (Michigan)

4. 10

© 2000 Blackwell Science Ltd *Journal of Internal Medicine* 247: 395–402

[illegible]

본 연구는 2014년 10월 1일부터 2015년 12월 31일까지 실시된 전국 17개 시도에서 진행된 2014년 제1회 전국동시지방선거에 출마한 정당 후보자의 정치자금 사용내역에 대해 분석하였다.

2. a. $\lim_{x \rightarrow 0} \frac{1}{x} = \infty$ b. $\lim_{x \rightarrow 0} \frac{1}{x} = -\infty$

1994 = 100

Information

- **Invitation**
 - **Location** (location on the invitation)
 - **Organizer**
 - **Terms** (terms that may be unfamiliar)
 - **Meeting location** relative to you

Invitee profiles

Ordered by org chart distance

Photo, title, department, office, building, phone number



Document and other... of the... and the... of the...

Document and other... of the... and the... of the...

Document and other... of the... and the... of the...

Adding more and making a couple of others who are not interested

My group history

My group history

My group history



My group history (bubala)

My group history (bubala)

My group history (bubala)

My group history (bubala)

My group history (bubala)

My group history (bubala)

My group history (bubala)

My group history (bubala)

My group history (bubala)



Bob Atkinson

Home

Home

Home

Shared Links

Shared Pages

SOFTWARE ARCHITECT

Software Management

Software Management

Software

Software Management

Group and Responsibilities

Contact Information

Contact Information

Shared Links

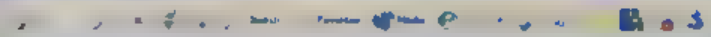
Shared Links

Recent Documents

Recent Documents

Reports To

Reports To



1. The first step in writing a paper is to choose a topic.

2. The second step is to research the topic and gather information.

3. The third step is to organize the information and create an outline.

4. The fourth step is to write the paper.

5. The fifth step is to revise and edit the paper.

6. The sixth step is to proofread the paper.

7. The seventh step is to format the paper.

8. The eighth step is to submit the paper.

9. The ninth step is to receive feedback on the paper.

2012



John Smith (bobak)

1000

John Smith (bobak) is a member of the [illegible] group.



John Smith (bobak)

1000

John Smith (bobak) is a member of the [illegible] group.



John Smith (bobak)

1000

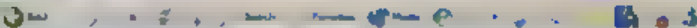
John Smith (bobak) is a member of the [illegible] group.



John Smith (bobak)

1000

John Smith (bobak) is a member of the [illegible] group.



File Edit View Favorites Web Help

File Edit View Favorites Web Help

Factors Web

Factors Web

Thursday, January 11, 2001
1:41:46 PM - Friday, 11 January 2001

Microsoft - Factors Web

The Factors Web site contains information

about a building in open enclosure area map. Select a building.

Select a map from the list below.

Factors Web

Factors Web

Factors Web

Factors Web

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Factors Web

Factors Web

Factors Web

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Factors Web

Factors Web



Factor: Web

2004-05-10

1870-1871

Lat+Ne: 1054-1152mV 1-1000mV 4

Microsoft Man: Tackling Asia's Man





Use the search bar to find documents and files in the system.

File

Search Web

Home

My Documents

Start the system

group finding & utility

File > Open > Open File > Open File

File > Open

Adding users and creating a group of users who are to be managed.

Managing the group

the group members

to get up the group members



Group Admin (bobeth)

File > Open

File > Open > Open File > Open File

File > Open

File > Open

File > Open

File > Open

File > Open > Open File > Open File

File > Open

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File > Open > Open File > Open File



Group Admin (bobeth)

File > Open



Group Admin (bobeth)

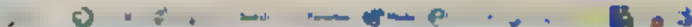
File > Open



Group Admin (bobeth)

File > Open

File > Open > Open File > Open File



■ 1986年10月1日 星期日

1682

[illegible]

?

[illegible]

1. 1998

7. $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{1}{2} \frac{d^3}{dt^3}$

?

John C. Wynn (Director)

1994

한국의 정치·경제·사회·문화에 대한 종합적인 이해를 돕기 위한
최신 자료를 수록한 『한국의 정치·경제·사회·문화』 1권
은 1998년 12월 15일 발행된 것으로, 1998년 12월 15일
현재까지의 자료를 수록하고 있다.

?

Malcolm Pearson (malc@cs.berkeley.edu)

44 10000

① $d \cdot \phi_k$ ② $\int_{\mathbb{R}^n} p_{\alpha} p_{\beta} \cdot \chi_{\alpha} \chi_{\beta} d\mathbf{x}$
 ③ $\int_{\mathbb{R}^n} p_{\alpha} p_{\beta} \cdot \chi_{\alpha} \chi_{\beta} d\mathbf{x}$ ④ $\int_{\mathbb{R}^n} p_{\alpha} p_{\beta} \cdot \chi_{\alpha} \chi_{\beta} d\mathbf{x}$
 ⑤ $\int_{\mathbb{R}^n} p_{\alpha} p_{\beta} \cdot \chi_{\alpha} \chi_{\beta} d\mathbf{x}$ ⑥ $\int_{\mathbb{R}^n} p_{\alpha} p_{\beta} \cdot \chi_{\alpha} \chi_{\beta} d\mathbf{x}$



Anderson, J. (1991) *London*.

34

Page 1 of 1

പ്രകാരം: 1. 1998-99-ലെ 10-ാം കോടതിയുടെ തീരുമാനം
2. 1999-00-ലെ 10-ാം കോടതിയുടെ തീരുമാനം

१. प्रथम विभाग
२. द्वितीय विभाग

11. $\frac{1}{2} \log_2 \frac{1}{2} = -\frac{1}{2} \log_2 2 = -\frac{1}{2} \cdot 1 = -\frac{1}{2}$

1. 姓名: _____ 学号: _____

1951 年 10 月 1 日

1434

Copyright © 2001 by John Wiley & Sons, Inc.

Not met, per 15.000

• 1994 年 12 月 25 日 12 月 25 日

10

[illegible]

Frucht: Schließfrucht (bottella)

+1 d-03

[illegible]

中 大 學 校 長 官 署 函 件 第 一 〇 一 號 函
 大 學 校 長 官 署 函 件 第 一 〇 一 號 函
 大 學 校 長 官 署 函 件 第 一 〇 一 號 函

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Isabel Rodriguez (Rodriguez)

449

[illegible]

74 125 00+000+ 100+ 100+

[illegible]

?

John Watson (husband)

品名 数量

이 책은 2004년 12월 15일 1판 1쇄를 펴냈으며, 2005년 1월 15일 2판 1쇄를 펴냈다. 이 책은 2005년 1월 15일 2판 1쇄를 펴냈다.



1100 Lytle (Nashville)

7 84 4

$$y = \frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx + \frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} g(x) e^{-x^2} dx$$

Figure 1

ਅੰਗੀਕਾਰਤਾ 14 ਮਾਰਚ 2020 ਨੂੰ ਅੰਗੀਕਾਰਤਾ ਨੂੰ ਪ੍ਰਾਪਤ ਕਰਨ ਵਾਲੇ ਸਮੇਂ ਤੱਕ ਅੰਗੀਕਾਰਤਾ

Meinung und Kritik

1975-1976

本公司 2014 年 12 月 31 日 2015 年 12 月 31 日 2016 年 12 月 31 日 2017 年 12 月 31 日



David Atkinson (bat0043)

At the time of the study, the following information was available:

1. 大 小 数 点 左 移 一 位 小 数 点 右 移 一 位
 2. 大 小 数 点 左 移 二 位 小 数 点 右 移 二 位
 3. 大 小 数 点 左 移 三 位 小 数 点 右 移 三 位

$$\begin{aligned} \phi &= d \log \det \cdot d(1 \dots d) = d(\det \cdot 1) \cdot d \\ &= d \log \det \wedge d(1 \dots d) = d \log \det \wedge d \\ &= \gamma_{d-1} \wedge d = \gamma_{d-1} \wedge d(1 \dots d) = d(1 \dots d) \cdot d \end{aligned}$$

?

1. **ଜାତୀୟ ଶାନ୍ତି ଦିବସ (National Peace Day)**

[Home](#)
[Contact Us](#)
[Privacy Policy](#)

[illegible]

Paul M. Hirschman, *University of Michigan*

[illegible]

?

Learn Words! (In German)

고민

[illegible]

— a. *Reddish-brown* a. *Reddish-brown*

?

Miss Lynn (Nathan)

4 11 11

Information

- **Invitation**
 - **Invitation** (includes **Invitation**)
 - **Invitation** organizer
 - **Invitation** terms that may be unfamiliar)
 - **Invitation** meeting location relative to you
- **Invitation profiles**
 - **Invitation** ordered by org chart distance
 - **Invitation** Photo, title, department, office, building, phone number

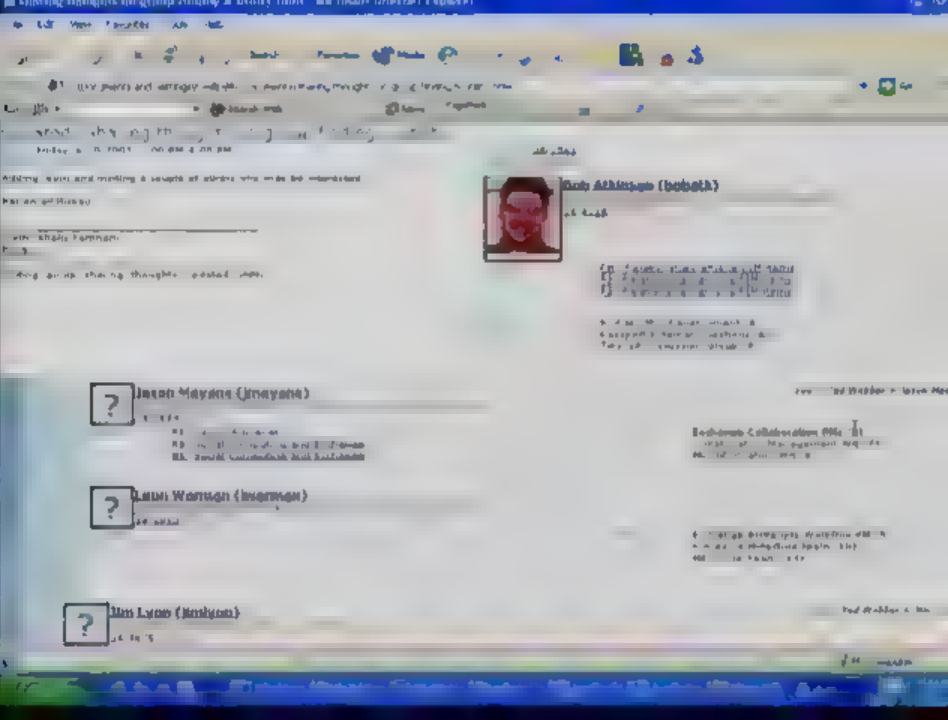
Communication History

- email, phone, textually from each attendee
 - 6 months before meeting
 - *100% match meeting attendee list*
 - *100% matching*

*Extract URLs, shares, attachments,
documents*

Social Network

- Connect each attendee to you
 - Name
 - E-mail
 - Phone
 - Address
 - Distribution lists
 - People with whom you both have some connection (Shelly -> Will -> Matt Kotler)
- Groups among attendees
 - Titles
 - Departments
 - Distribution Lists





Mimi L. Sano (Jember)

6000

1000 1000 1000 1000

1000 1000 1000 1000
1000 1000 1000 1000
1000 1000 1000 1000



Mimi L. Sano (Jember)

6000

1000 1000 1000 1000

1000 1000 1000 1000
1000 1000 1000 1000
1000 1000 1000 1000



Arif Nurul Huda (Jember)

6000

1000 1000 1000 1000

1000 1000 1000 1000
1000 1000 1000 1000
1000 1000 1000 1000

1000 1000 1000 1000
1000 1000 1000 1000
1000 1000 1000 1000



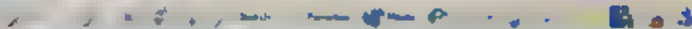
Wili Partway (Jember)

6000

1000 1000 1000 1000

1000 1000 1000 1000
1000 1000 1000 1000
1000 1000 1000 1000

1000 1000 1000 1000
1000 1000 1000 1000
1000 1000 1000 1000



1. *University and industry jointly own and manage the rights to the technology for 5 years.*



Uterine Lesions (Hematomas)

1994

14. *Field Notes* 4 Feb. 1941

이 단락을 보면, 이 단락을 보면, 이 단락을 보면, 이 단락을 보면, 이 단락을 보면



Trinidadian Food and Culture (1990-2010)

\$1,500.00

© 2006 The Authors
Journal compilation © 2006 Blackwell Publishing Ltd

[illegible]

Ausgangspunkt: 1. April 1998 (Eröffnung)

... ..

2000 年 12 月 10 日 星期日

● 2014年10月1日施行の改正労働契約法により、労働契約の締結に際して、労働者は、労働契約の締結に際して、労働者の権利を侵害する恐れがある労働契約の締結を拒否する権利が認められることとなる。

Figure 10

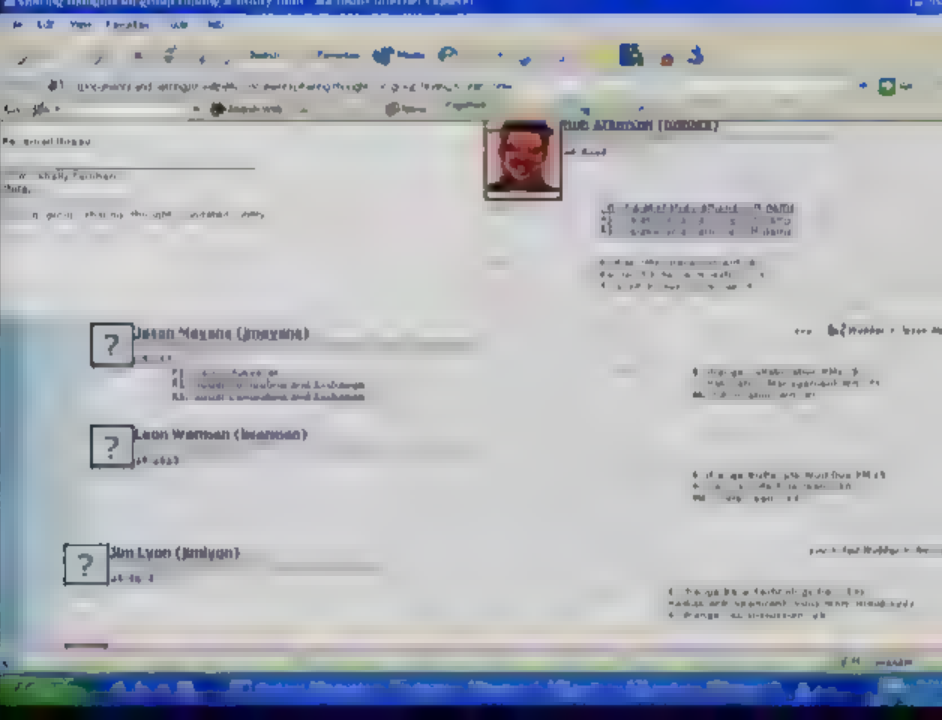


YWHF Protein (E. coli)

• **Good**

[illegible]

he: 10 100 1000 10000 100000
 he: 1000000 10000000 100000000 1000000000 10000000000
 he: 100000000000 1000000000000 10000000000000 100000000000000 1000000000000000



Social Network

- Get connections from each attendee to you
 - Distribution lists
 - People with whom you both have some connection (Shelly -> Will -> Matt Kotler)
- Groups among attendees
 - Titles
 - Departments
 - Distribution Lists

Summary & Next Steps

- 10/15/05
 - Review of selected content
 - Get things out outside Microsoft
 - Test for different meeting size
 - Close the loop (include post-meeting content)
 - Get user feedback

Current prototype is available (<http://groupsts/scg/>)

Contact info: t-willp, shellyt

Jeitinhos

Matchmaking for XBOX live

Jens Riegelsberger (UCL, UK)

Bruce Phillips, Shelly Farnham, Tim Regan

Social Computing Group, MSR

Microsoft Game Studios

Aug 21, 2003

Microsoft Confidential

XBOX live

- Multiplayer with voice
- Released Nov 15 2002
- ~ 500K subscribers worldwide



First Results – Current Use

First Results – Current Use

- ▶ Play with absent friends
- ▶ Time spent on setting up matches

First Results – Current Use

- Play with absent friends
 - Time spent on setting up matches
- Find others to play with
 - Find them instantly
 - Humans are more interesting than AI

First Results – Current Use

- Play with absent friends
 - Time spent on setting up matches
- Find others to play with
 - Find them instantly
 - Humans are more interesting than AI
 - 'It's good to know that someone in his living room is grieving.'

OPTIMATCH

FILTER

Min. Players

2

Max. Players

6

 Cancel

 Continue

 Host

 Refresh

 Back

 Select

OPTIMATCH

Game	Type	Players
Bonnie Mallard	Team Destruction	2/0
5777jolo311	Destruction	1/0
Burnout 3	Team Destruction	1/0
Spinasman	Team Destruction	2/0
Goat Simulator	Capture the Flag	2/0
LOVE 10	Team Destruction	2/0
The Mighty	Capture the Flag	3/0
Tyler's	Team Destruction	4/0
Sally	Team Destruction	2/0
Dark MK	Team Destruction	2/0

Gameplay: Session: Real Time

Map: DM: Unlimited Time Limit: 15

Filter

Host

Refresh

Back

Select

OPTIMATCH

Game	Type	Players
Bomb Match	Team Destruction	20
777ato311 s	Destruction	10
Beach Ball Match	Team Destruction	10
Spinnegmen	Team Destruction	30
meatsake	Capture the Flag	30
70ME10	Team Destruction	30
The Mighty	Capture the Flag	30
Typhank	Team Destruction	40
Baley	Team Destruction	30
Dark MC	Team Destruction	10

Session: Real 3rd

Time Limit: Unlimited

Time Limit: 10

Filter

Host

Refresh

Back

Select

First Results – Problems

- Many matches are bland, some are bad

First Results – Problems

- Many matches are bland, some are bad
- Game – team killing, counteracting missions, 'stealing kills', frequent entries / exits

First Results – Problems

- Many matches are bland, some are bad
- **Game** – team killing, counteracting missions, 'stealing kills', frequent entries / exits



Trash Talk



Anger Management Issues



Anger Management Issues

- Lack of accountability

Anger Management Issues

- Lack of accountability
- De-individuation

Anger Management Issues

- Lack of accountability
- De-individuation
- Mismatches

Ideas

Ideas

Base matches on

➤ Personal attributes

- Reduce de-individuation
 - Create mini-alliances based on shared attributes (Jenkins)
- [Demelle 2003; Zheng et al. 2002; Davis et al. 2002.]

Ideas

Base matches on

➤ Personal attributes

- Reduce de-individualisation
- Create mini-alliances based on shared attributes (Jethi et al.)
[Demette 2003; Zheng et al. 2002; Davis et al. 2002]

➤ Voice tag & portrait photo

- Convey information that is not explicitly given (e.g. social status)
- Photos are quickly parsed
- Visual identification increases cooperation
[Zheng et al. 2002; Schmit & Frey 1997]

SOCIOMATCH

Game Type:

Any

Match on:

Playing Style

Game Type

Game Type

Min. Players:

2

Max. Players:

8

Cancel

Continue



Y Quit



Refresh



Back



Select

Research Questions

Main Question

- Do players enjoy games more when they choose their partners based on personal information, voice, or a photo?

Research Questions

Main Question

- Do players enjoy games more when they choose their partners based on personal information, voice, or a photo?

Secondary Question

- Which factors in personal information, photo and voice determine preference?

Research Design

What is the best way to answer the research question?

What is the best way to answer the research question?

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Research Design

Invite + get
profile information

10000
Personal
Information

10000
Personal
Information

10000
Personal
Information
+ Photo

10000
Personal
Information
+ Voice

Research Design

Invite + get
profile information

Enter preferences

PRE-STUDY

NE=100
Personal
Information

NE=100
Personal
Information

NE=100
Personal
Information
+ Photo

NE=100
Personal
Information
+ Voice

2 x 30

2 x 30

2 x 50

Preference

Preference

Preference

Regression

Regression

Regression

Research Design

Invite + get
profile information

Enter preferences

PRE-STUDY

Match preferred
partners
Conduct play test

MAIN STUDY

1000
Personal
Information

10 dyads
Personal
Information

N = 100

Personal
Information

2 x 50

Preference

Regression

10 dyads

Personal
Information

N = 100

Personal
Information
+ Photo

2 x 50

Preference

Regression

10 dyads

Personal
Information
+ Photo

N = 100

Personal
Information
+ Voice

2 x 50

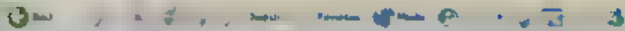
Preference

Regression

Study Timeline

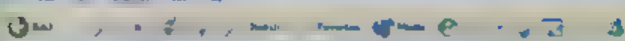
Study Timeline

- ▶ Participants register profiles via the on-line lab (Aug 25)
- ▶ http://olap2/yyiab_test/profiling/img.aspx

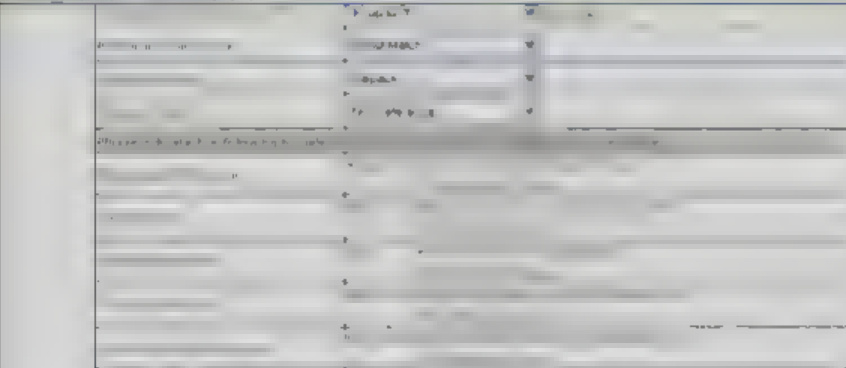


...
 Please read this first
 This site contains information that is intended for use by other participants in the course and is not to be used for any other purpose.

Name: _____	
Email: _____	
Password: _____	
Confirm Password: _____	
Register	
Login	



Das Diagramm zeigt die Struktur des Projekts.

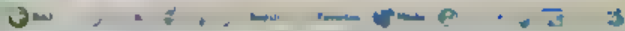


Das Diagramm zeigt die Struktur des Projekts. Es ist eine hierarchische Darstellung der Dateien und Ordner. Die linke Spalte zeigt die Baumstruktur, die rechte Spalte zeigt die Details der ausgewählten Datei. Die Struktur ist wie folgt aufgebaut:

- Projekt
 - Quellcode
 - src
 - main.c
 - utils.c
 - utils.h
 - config.h
 - include
 - utils.h
 - config.h
 - obj
 - main.o
 - utils.o
 - bin
 - main.exe
 - Dokumentation
 - README.txt
 - INSTALL.txt
 - CONTRIBUTING.txt
 - Tests
 - test_main.c
 - test_utils.c

Study Timeline

- Participants register profiles via the on-line lab (Aug 25)
 - http://olap2/vwlab_test/profiling/lmg.aspx
- Participant choose who they want to play with based on profiles (Sep 1)
 - http://olap2/vwlab_test/profiling/rating.aspx
- A subset of participants is invited to play in the games test lab (Sep 8)



1. Select the text in the first column.

2. Right-click and choose 'Copy'.

3. Move the cursor to the second column.

4. Right-click and choose 'Paste'.

5. Repeat steps 1-4 for the remaining columns.

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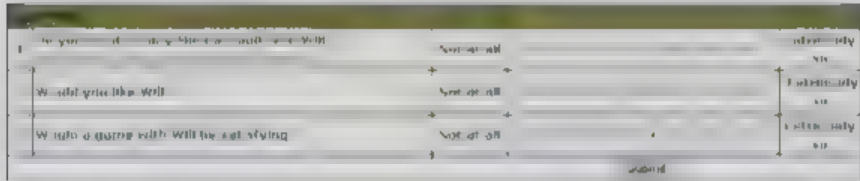
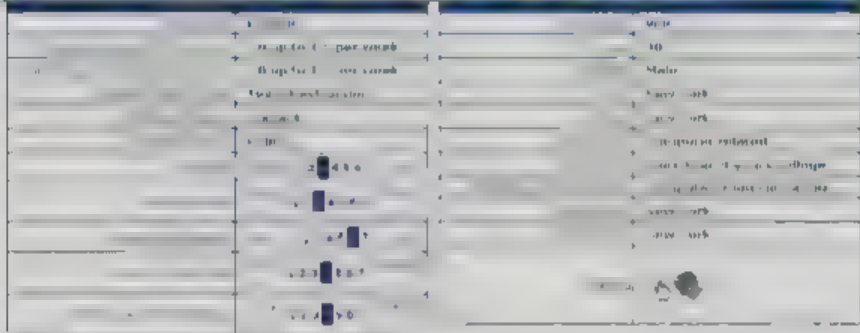
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3. Move the cursor to the second column.

4. Right-click and choose 'Paste'.

5. Repeat steps 1-4 for the remaining columns.

Column 1	Column 2	Column 3
1. Select the text in the first column.	2. Right-click and choose 'Copy'.	3. Move the cursor to the second column.
4. Right-click and choose 'Paste'.	5. Repeat steps 1-4 for the remaining columns.	



Study Timeline

- Participants register profiles via the on-line lab (Aug 25)
 - http://olap2/vwlab_test/profiling/img.aspx
- Participant choose who they want to play with based on profiles (Sep 1)
 - http://olap2/vwlab_test/profiling/rating.aspx
- A subset of participants is invited to play in the games test lab (Sep 8)

Outcomes

- Relevant attributes for XBOX live matchmaking



Outcomes

- > Relevant attributes for XBOX live matchmaking
- > Input for auto-matching algorithm
(from regression analysis)

Outcomes

- > Relevant attributes for XBOX live matchmaking
- > Input for auto-matching algorithm (from regression analysis)
- > Knowledge about effects of voice and photo for ad-hoc online interaction

Acknowledgements

Many thanks to

- > Microsoft Game Studios
- > XBOX live

Bruce Phillips, Fleming Seay, Keith Steury,
Noah Heller, Karen Carter-Schwendler

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